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COLUMBIA UNIVERSITY

1925

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EDUCATIONAL YEARBOOK
OF THE
INTERNATIONAL INSTITUTE
OF TEACHERS COLLEGE
COLUMBIA UNIVERSITY

1925

EDITED BY

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PREFACE

THE present volume is the second *Educational Yearbook* issued by the International Institute of Teachers College, Columbia University. To the twelve articles on as many national systems of education which were contained in the *Educational Yearbook* for 1924, the present volume adds articles on the educational systems of eleven countries, their historical origins and development, and continues from the previous volume the accounts of the progress of education in England, France, Germany, and the United States. A separate section on the Problem of the Elementary School Curriculum supplements the discussion contained in the last yearbook on the Problem of Method. The articles although collected in the form of a yearbook are not devoted solely to records of educational developments during any one year, but aim rather to give a complete and up-to-date statement of the educational systems of the countries concerned.

To the contributors the editor is under a special obligation for their coöperation in preparing the present volume under somewhat difficult conditions.

I. L. K.

NEW YORK, 1926

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INTRODUCTION

THE first two volumes of the *Educational Yearbook* have presented descriptions of the educational systems of twenty-three countries.¹

This conspectus makes possible a comparative study of the progress of education in its different branches and grades, and at the same time throws into relief the more outstanding problems that confront the educators of the world.

In general it is clear that the phase of education that has been attacked most seriously and with the greatest success is the elementary. On the foundations laid during the nineteenth century a structure is now being erected that is more appropriate to the demands of the present century. The importance of elementary education is appreciated universally as it has never been before, partly as a result of national self-consciousness awakened since the war, partly under the influences of a clearer conception of democracy, and partly because of a more definite recognition of the place of the individual in social and national progress. It is from this appreciation that active interest has everywhere been aroused in the problem of illiteracy which manifests itself in efforts to improve the legislation on and the administration of compulsory attendance requirements and in increased provision for the education of adult illiterates. Another phase of the same movement is the introduction of programs of health education, medical inspection,

¹The *Educational Yearbook*, 1924, contained articles on the following countries: Australia, Bulgaria, Canada, China, Czechoslovakia, England, France, Germany, Italy, Norway, South Africa, and United States.

physical training, and social welfare work that will enable the pupils to reap the greatest benefit from elementary education and to receive a sound foundation for their physical and mental development.

Out of the last consideration, supplemented by considerations of social needs, there is also developing slowly and surely an interest in the education of children of preschool age. The direction of this type of education is, it must be admitted, not quite clear, but it is sufficient for the present that the existence of a problem is recognized, and recognized in forms that will result in a type of education that will be different from the kindergarten of the nineteenth century. This difference will be based not merely on the recognition of a social need but also on the contributions of modern psychology and philosophy of education.

Elementary education itself is beginning to show the influences of these contributions. Formalism, memorization, and drill work are gradually finding their proper places in the scheme of education — if, indeed, they are not being sacrificed — and larger scope is being found for a richer and more meaningful content, for meeting individual needs, and for methods of study that make for intellectual growth and development. Because the elementary school is acquiring a new character and a status different from that which it enjoyed in the nineteenth century, there is developing a demand, again very widespread, that it become in a true sense the school of democracy, the common school for all the children of all the people. From this demand there flows another problem concerning the duration of elementary education and the stage at which that differentiation which is demanded by the new educational psychology shall begin.

The problems of elementary education stand out clearly everywhere ; efforts at their solution are only just beginning.

Their recognition is recent ; how soon they will be solved effectively depends in each country on the force of social traditions. There is one problem, however, which has not been grasped as clearly and as extensively as the rest ; no effective solution of the problems of elementary education is possible without a more scientific approach to the training of teachers. The history of education has accumulated a large number of catchwords and sententious phrases about the teacher and his place in social progress. But unless steps are taken to adapt methods of teacher preparation to the new demands on the elementary school, all that is expected of it will remain theoretical and futile. Even countries that are to-day leading in educational theory are still content not merely to continue systems of training that may have been adequate for the nineteenth-century conception of education but even to employ teachers with little or no training. It is for this reason that the movements for progressive education, which have their representatives in all countries, are likely to fail. It is somewhat of an anomaly that the leaders in these movements have nowhere given any indication how the teachers who are to carry out their theories shall be trained. On the other hand, the demands for university preparation for elementary school teachers, which, as a rule, emanate from the ranks of the elementary school teachers themselves, are open to the suspicion that they have not always been based on a clear recognition of the needs and requirements of elementary education. At the present stage in the development of elementary education the problem of devising an adequate practical system of professional preparation of teachers is acute.

Elementary education in general, then, is in a ferment and shows, from whatever aspect it is viewed, signs of healthy development. That immediate solutions of all the problems

are not at once available helps to keep the situation in that state of flux which stimulates the best thought. The same statement cannot be made of any of the other branches of education that follow the elementary. Compare, for example, the number of internationally known names in the field of elementary education with the number of names of similar distinction in secondary education! Or compare the progress of elementary education during and since the nineteenth century with that of secondary education in the same period!

Secondary education, it is true, passed through a period of unrest in the last ten or twenty years of the nineteenth century. The chief result of that unrest was merely to place a few of the so-called modern subjects on a parity with those that had become traditional. It was not long before the demands of discipline and examinations and of university entrance requirements, however skilfully disguised, reduced the modern subjects to the same position as those subjects that they were intended to replace. The fact is that, while the unrest had its foundations in demands for adjustment to the needs of modern societies, the reforms that followed were based on compromises between subject specialists. At the root of the whole matter has been the survival of a conception of culture formulated when education was the right and possession of the few.

And to-day it is only the few that reap the benefits and advantages of secondary education as conceived and organized at present. To justify this state of affairs it is claimed that the vast majority of boys and girls who do not complete the secondary school course derive a "something" from their exposure, no matter for how short a time, to the secondary school atmosphere. What that "something" is no one can say precisely — "mental discipline," "character," "methods of work," "ability to apply oneself to tasks

that are distasteful but must be performed," and the like. It is as if a large and expensive factory were maintained in the hope that ten per cent of its products would be perfect and the remainder, at different stages of completion, find markets somehow and somewhere. The analogy is crude because education deals with human beings. All the more reason, then, for inquiring what happens to the ninety per cent that fail, an infinitesimal fraction after all of the adolescent youth of a nation that enjoys the opportunity of receiving secondary education.

It does not necessarily follow, however, that the type of education that produces the élite, the ten per cent which constitutes the finished product, is unnecessary or undesirable. But it is essential to begin to think in terms not merely of the ninety per cent or so that fail to complete secondary education, but in terms also of the increasing number of boys and girls for whom opportunities for post-elementary education should be opened up. If current terminology in education is to have any real meaning, it is necessary to think of *secondary* education not as a type of education for the few but as a type that follows what is increasingly coming to be called *primary*. In other words secondary education should be considered as the education of preadolescent and adolescent youth.

This means, then, that postelementary education should consist not of a large number of unrelated and unarticulated types of education, a conglomeration of trade, industrial, commercial, higher elementary, intermediate, and secondary education, each of these having different social values, but of a large variety of opportunities suited to individual needs, closely interrelated, without artificial barriers, and leading the individual as far as his ability and intelligence will take him. If modern educational psychology has any significant contribution to make, it is certainly in the emphasis on

individual differences; up to the present these have been met by substituting modern for classical languages.

But the problem of adolescent education does not stop merely with efforts to meet individual needs and abilities. The philosophy that at present underlies the reforms in elementary education must be applied to education that succeeds it. The problem in a word is to discover a new conception of culture, a definition not in terms of so many subjects but in terms of activities adapted to the intellectual levels of adolescents and having their origin in the activities, institutions, thought, and organization of modern society. Instead of accepting something rigid, adolescent education conceived in terms of individual and social needs would enrich both society and the individual. Such an approach does not mean the exclusion of the subjects traditionally associated with secondary education, but it means a method of approach to each of them that will make them more vital, significant, and meaningful. But it means something more; it will involve an expansion of the number of "subjects" in the program of adolescent education to include activities that have hitherto been neglected as uneducative, or lacking in disciplinary value, or as too easy, or else taught "incidentally." Thus in a modern society an adolescent on completing his education would not come out of school ignorant of the meaning of life around him, ignorant of the place of science and industry in an industrial age, contemptuous of activities and vocations on which society of to-day is based, without any knowledge of the recent history of his country and of its political and social organization, and, worse still, without any interest or desire to find out about any of these things, because the school has failed to point out their significance and value to him.

It will be objected that such a type of adolescent or secondary education is valueless for "general" education; that

only the "disinterested" studies are truly educative and disciplinary; that true scholarship cannot be fostered by such programs. It will further be suggested that the only nation that has adopted such a foundation for its system of secondary education is neither literary, scholarly, nor cultured. Possibly this criticism is sound, but it must be remembered that what is being compared is the partial result of an experiment of scarcely twenty years with the results of some four hundred years of effort based on the traditional conception of culture, which only the small minority ever achieved.

No attempt is made here, however, to plead for one type of education as against another. All that is desired is to suggest some of the problems that must be faced in the reorganization of secondary education. If he looks the problems honestly in the face, the reformer in this field must ask himself a number of questions: Under the present conception of secondary education how many pupils successfully complete the task that is set them, how many fail to complete it, and what advantages have they derived from the partial course? Can any nation or society afford to maintain a system of education in which only about ten per cent of the pupils succeed to the end? What is culture in modern times? Is culture associated merely with the study of a limited number of "subjects" or has it an entirely different connotation? What is the meaning of an educated *élite* in the social fabric? Are scholarship and its methods cultivated only by a small range of subjects and those "disinterested"? What has been contributed by educational psychology and the psychology of adolescence to the reorganization of secondary education? Finally, do modern social development, the needs of modern progress, democracy itself, make demands on the modern citizen that are not met by secondary education as conceived almost uni-

versally to-day? There are no doubt other questions and other problems in administration and organization, in coördinating different types of postelementary education, in the guidance of pupils, in the training of teachers and so on. These are subsidiary matters until a philosophy of secondary education as generally acceptable as the tendencies in elementary is attained.

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PART I

EDUCATIONAL DEVELOPMENTS

ARGENTINE REPUBLIC

BY

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ARGENTINE REPUBLIC

INTRODUCTION

The Argentine Republic consists of fourteen provinces, ten territories, and one federal district, and covers an area of 1,153,119 square miles with a population in 1924 of 9,548,092. The Republic has a federal government, the Constitution being in general very similar to that of the United States in the matter of the relations between the central government and the provinces. One of the most important differences between the Argentine Republic and the United States is to be found in the administration, provision, and organization of education. Of the former, as generally in the countries of South America, the chief characteristic is that education is preëminently a governmental function.

The federal constitution as well as the constitutions of the provinces have vested in the central government most of the authority in educational matters, including the control and initiative, leaving little opportunity to the inhabitants of the smaller political units to express their social ideals through their schools. This form of organization has reacted unfavorably on the social mind, and education is generally regarded as a matter for technical and administrative experts, transcending the ordinary interests of the people, or as a governmental agency offering the individual a number of opportunities for social advancement.

This situation has been brought about by a number of political factors: (1) The War for Independence (1810) found the country in a state of profound ignorance, which

could only be removed by prompt and energetic action on the part of the *élite* who took the direction of affairs into their hands. (2) In Catholic Argentina, as well as in Catholic France, the state has believed it to be its duty to organize a strong lay system of education in opposition to the school system controlled by the Catholic Church. This opposition reached a crisis in 1880, the result of which was the severance of diplomatic relations with the Holy See and the enactment of the present Public School Law, under which it is provided that private education shall be under state supervision. (3) Roman and Spanish traditions have accustomed the people to expect governmental intervention and assistance even in matters where local initiative might be available or ought to be forthcoming. (4) Certain of the provinces, built around cities, whose economic importance has diminished since colonial days (*e.g.*, San Luis, La Rioja, Catamarca, Jujuy, Santiago del Estero, and others), are now unable to carry out even the most modest educational program, thereby compelling the federal government to go to their assistance. Several decades of such federal intervention (since 1871) have resulted in the centralization of control in Buenos Aires over a considerable number of schools. Local interest in educational matters has diminished in proportion to the number of such federally aided schools. (5) Of all the governments of Argentina the federal is by far the richest because it controls the national ports which yield the chief and least resented form of revenue, the customs duty. While most of the provincial governments struggle with financial difficulties, the federal government enjoys the benefits of an ever-increasing international commercial intercourse. This fact works in opposition to the federal idea and brings about a gradual centralization of power with the result that the federal government constantly increases its activities throughout the whole

territory of the Republic and that the national public services are far better organized and its officials better paid than are the provincial ones. (6) With the exception of primary education, which, following the American model, was intrusted to the provincial governments, all the rest of Argentina's educational institutions are supported by the federal government through an important department, the Ministry of Public Education and Justice, whose chief is one of the eight members of the Presidential Cabinet.

ADMINISTRATION OF EDUCATION

The administration of education is divided between three chief centers of authority :

(1) **Provincial governments.** — These control elementary education in each of the fourteen provinces of the country. The federal constitution makes it compulsory for the provinces to organize " general education," it being usually understood that this means elementary or common education. Some of the provincial constitutions, however, provide for the organization of normal, secondary, and even university education ; for reasons that will be given later such provincial institutions have not been developed.

Provincial normal schools have been a little more successful. The fact, however, that the graduates of the national normal schools can teach in any elementary school of the larger national system, while the diploma from a provincial normal school is only valid within the provincial territory, makes an important difference.

(2) **National government.** — On the national government devolves the administration of two important educational systems :

(a) Through the Minister of Public Instruction it controls partially university education, and entirely all public second-

ary, normal, and vocational education as well as the education of defectives throughout the Republic.

The technical and administrative organ of the Ministry of Public Instruction is the Inspector-General of Secondary, Normal, and Special Education, whose autonomy is restricted by a body of elaborate "rules" having the force of Presidential decrees. The Inspector acts as an advisory agent to the Minister and sees, through periodical inspections, that all establishments under the Ministry of Public Instruction are running according to the rules. For this purpose there are, besides a large office staff, twenty-two inspectors, including the Inspector-General.

(b) The city of Buenos Aires, being the capital of the Republic, together with the national territory, falls under the jurisdiction of the federal government in the matter of educational control. All the important group of schools included here is governed by the National Board of Education, whose five members are appointed by the President. Under the Board there is a body of technical supervisors who direct the school work in these three fields: elementary schools in Buenos Aires, a community of nearly two million population; elementary schools in the national territories, a very extensive field consisting of vast tracts of sparsely populated land; and the national elementary schools in the provinces.

The federal government, as already mentioned, aids the cause of elementary education in the provinces financially in the following manner: (1) Since 1871 the federal government has contributed toward the educational expenses of the provinces on condition that at least ten per cent of their own resources be devoted to elementary education. The proportion of the national subsidy is not uniform; those provinces that are least favorably situated economically receive proportionately more than the wealthier ones.

(2) Since 1905 federal aid has been supplemented by the establishment of national or federal elementary schools in those provinces that demand such assistance ; it is generally understood that such schools are to be established in remote districts where the provincial authorities cannot maintain schools.

(3) **Private activity.** — Private schools and colleges are subject to supervision either by the National Board of Education for elementary schools, or by the Ministry of Public Instruction for secondary, normal, and special schools. Private schools are required to follow the official syllabi and courses of study ; they must devote to the teaching of each subject the same number of hours a week as are prescribed for public institutions ; their teachers must possess the necessary qualifications and must be approved by the Minister of Public Instruction on the recommendation of the Inspector-General ; and the pupils must pass annual examinations before mixed commissions, in which official teachers are in the majority.

ORGANIZATION OF EDUCATION

To understand the educational situation in the Argentine Republic it is necessary to reverse the usual order of studying the main branches of education, elementary, secondary, and university. Here it is necessary for the sake of clearness to begin the survey of the organization of education with the higher forms, explaining on the way the reasons for such a reversal of the order.

UNIVERSITY EDUCATION

In starting the survey of the educational institutions with the university one is confronted at once with an institution that represents the chief goal of the educational activities of

the student, that embodies the standard of educational procedure, and that is the agency of the highest type of culture. Behind this highly respected institution and furnishing the reasons for this esteem stands the state, which on account of the historical reasons already mentioned is completely identified with the control of education to an extent unknown in any other country outside of Latin America.

Two aspects of the state's interest in education have to be distinguished: (1) Its function as the promoter of culture through compulsory education laws, founding of public libraries, fighting illiteracy, etc. — an activity that is as important as the promotion of health, morality, and so on. (2) Its function as the organizer of educational activities, marshaling them to certain definite goals whose acceptance is virtually forced on the people.

It is this second aspect of the educational activities of the state that the governments of the Argentine Republic have developed considerably. From many points of view such identification between the state and education has been of the greatest benefit to the country and for the following reasons: (1) It has made possible the very birth of the new nationality out of the chaotic conditions following the Revolution. (2) It has secularized education. (3) It has closed the military era in the social history of the country. (4) It has created a body of legislators, publicists, and men of letters who have acted as leaders of the people. (5) It has given a brilliant social sanction to education, thus preparing the public mind for its acceptance as a social good.

But the identification of the state with education has had other effects which must be considered. In aiming to determine the national ideal and culture of the country, the state had to prepare its own coworkers — lawyers, doctors, engineers, agricultural experts, teachers, professors, and so on, thus enlarging its general policy of protection and extend-

ing it into the field of education. This protection embodied the enjoyment of a number of privileges, the most prized of which is the possession of a diploma having legal validity throughout the country. Through the diploma the state itself vouches for the ability of its holder for an indefinite length of time, irrespective of his real ability and despite the consequences that any possible relaxation of his personal progress may have on the quality of his work.

Thus the granting by the state of a professional diploma places the professional activities on a privileged plane as compared with all other social activities. While, in the latter, ability has to be proved by hard competition in an open market, the diploma takes ability for granted and protects its holder from the extremes of competition by artificially reducing the number of competitors. Furthermore, the diploma tends to level the merits of its possessors; it shields slovenliness and takes away the chief incentive to self-improvement.

The privileged character of the state-protected activities is so great that : (1) All other social activities that are subject to the risks of open competition are shunned and regarded with contempt. (2) Students flock to the university irrespective of their real vocations. (3) Universities and schools that prepare for them are overcrowded beyond the needs of society. (4) Academic institutions being crowded beyond social needs, the state is compelled to set up a restrictive system directed toward the quantitative selection of candidates for official degrees, thus impairing the state's function as promoter of education and culture. Such a system of restriction develops gradually into a huge machine whose activities are devoted mainly to setting up artificial barriers in the way of the student's progress to the university. (5) Diplomas and not ability being the guarantee of efficiency, all the student's efforts are directed to obtaining the

former, work that is not essential to the attainment of the degree being neglected. Even in the work that is required the acquisition in a permanent form of the scientific content of his profession is less vital to the student than the superficial acquisition of it as a means of promotion from course to course. As a consequence he is less interested in the scientific efficiency of the university than would be the case were he left to himself in a competitive professional world. Thus the university is not stimulated from within. (6) The state control of education amounts to a state monopoly, depriving the university of the benefits of sound institutional competition, the result of which is that university progress is not greatly stimulated from without. (7) The professional character of the university leaves little room for the application of the elective system. Moreover, the tutorial character that state intervention has taken, tinged as it is with a certain distrust of student freedom, does not lend itself to the consideration of the individual needs of the student.

The above considerations explain why there are no private universities in the Argentine Republic. No diploma issued by a private or even by a provincial university could possibly compete with the enormous prestige of a government document. Tentative efforts have been made to establish provincial universities (Buenos Aires, Tucumán), but it was thought advisable to request the national government to take them over. In the same considerations will be found an explanation of the fact that the universities are strictly professional institutions, that is, institutions for the preparation of those who, armed with a government license, can contract their services with the public (physicians, lawyers, architects, engineers, etc.), besides being able to perform tasks of an official character (members of the judiciary, medical, financial, and educational services, public works, agriculture, etc.). It should be noticed that all these activ-

ities have an economic implication either in the form of a government salary or of fees whose amount is enhanced over what it should be, were the exercise of such activities left to the play of free competition; not only does this mean an interference with the economic laws of supply and demand, but the expression of personal choice of vocation according to inclination and ability is discouraged.

There are many who believe that the solution of all Argentina's educational problems awaits the restoration of natural incentives for human endeavor, the chief of which is personal calling freely obeyed and conditioned only by the law of supply and demand in a social market open to free competition.

University organization. — The five universities of the country are Cordoba (1613), Buenos Aires (1821), La Plata (1902), Tucumán (1912), and Litoral (1919) with its schools distributed in Rosario, Paraná, and Corrientes. The University of Cordoba, now in existence for more than three centuries, was founded by the Jesuits and Franciscans for the preparation of the clergy. The University of Buenos Aires, founded by the government five years after the Declaration of Independence from Spain, grew out of several Jesuit institutions left by the members of this order after their expulsion from the Spanish colonies in the latter part of the eighteenth century. On passing into the hands of the government the universities were secularized, but their function as agencies for the preparation of the Argentine clergy was retained.

The universities enjoyed a certain amount of autonomy until 1885, when Congress passed a law setting up the principles of administration of these institutions as part of the system of free education. The law provided that the rectors should be nominated by the faculties and appointed by the President, who according to the constitution appoints and

removes all employees in the national services. Professors were to be appointed, also by the President, from a list of three names (*terna*), submitted to the President by the faculty concerned, with the approval of the higher council of the university consisting of the rector and the deans.

The collegiate bodies — councils and academies — were self-perpetuating until 1918, when the students overthrew the authorities and compelled the government to enact a new university organization based on the suffrage system. Under this system the rectors, deans, members of councils, and professors are elected by a body of electors, including professors and students, the latter making up about one third of the voters.

This system supplemented by the boycott gave the predominant power to the students to an extent that practically places the government of the universities in their hands. They introduced some healthy innovations, such as that which permits outsiders, who have the ability, to teach in the universities. They also gave a new impetus to university extension and secured the general recognition of student centers, etc. Compulsory attendance at classes was also abolished by them, a measure which, together with that introducing outside competition for lectureships, was directed against the inefficient professor, who was compelled either to leave or to lecture to empty benches.

Unfortunately internal "politics" began to infect the university atmosphere and a *modus vivendi* was soon established between the indifferent students and some of the professors who were either afraid of losing their positions or were aiming at higher positions in the government of the universities. A reaction set in, favored by political circumstances. The statutes were modified to some extent; but the students are still an important part of the electoral system and exercise an important influence in the appointment of professors,

deans, and members of the council, and, of course, of the rectors of the universities. This influence they exercise not as formerly through student delegates in the council but through the professors elected to represent them.

University administration. — With slight variations according to the particular university, university administration is vested in a rector, chosen by a higher council made up of delegates from the different schools or *facultades*. The rector exercises restricted powers in the sphere of administration and instruction. The higher council approves the university budget, by-laws, and courses of study, and hears cases brought before it on appeal.

Each *facultad* is governed by an academic council whose members are elected and which is presided over by a dean elected for a period of years. The dean supervises the educational activities of his faculty and is the executive officer of the academic council, which legislates on administration, discipline, and educational matters. It hears complaints on the application by the dean of the regulations of the faculty, submits the budget, the course of study, and the professorial *terna* to the higher council, administers the funds of the faculty, appoints and dismisses assistant and extraordinary professors, and has the right to grant leave of absence up to thirty days to professors. Besides these authorities each faculty has an association of professors with varied powers, such as dealing with questions of discipline, discussions of the course of study, and so on.

The universities have certain characteristics that distinguish them from either the European or American university. They are located in cities. One of them, the University of the Litoral, has inaugurated a new idea, that of spreading the university influence over three provinces. Thus its faculties of medicine and of industrial chemistry are located in Rosario, Santa Fé, its agricultural school at

Corrientes, and its faculties of education and commerce at Paraná, Entre Ríos.

Professorships in the universities and to a certain extent in secondary and normal schools do not constitute a specialized profession, but are held in most cases as side occupations by men who have distinguished themselves along certain academic lines. The time that they devote to the classes is relatively small, and their salaries have to be comparatively higher than those of the regular professors in Europe or in the United States. A professor teaching three hours a week commands a salary of 4200 pesos a year. Each professor is appointed to a *cátedra* or chair, which entitles its occupant to teach one subject of a course, a position which usually involves three hours of teaching a week.

Students do not reside at the universities, nor are there facilities for taking meals together. There are few opportunities for university life except through the student centers, whose activities are devoted in the main to university politics. The students of each faculty or school have their own centers. Through delegates the individual centers are united in the university federation, and the university federations send representatives to the Argentine University Federation of Students.

The social life of the students finds some expression through theatricals and sports. The students of the University of Buenos Aires maintain a well-appointed University Club. There is no student residence and its absence constitutes a problem for the student who leaves his home to attend the university; thus fifty-seven per cent of the students in the University of Buenos Aires come from outside cities. Opportunity for self-support is provided for students in minor university appointments.

The universities, being supported by the state, are free save for a small matriculation fee. Despite the need of reducing

the number of university students the authorities have never resorted to the introduction of fees to cut down the number of applicants. The funds for the universities are voted annually by Congress as a part of the annual government budget. For the present year the provision is as follows:

UNIVERSITY	Pesos
Buenos Aires	8,825,000
La Plata	3,684,000
Cordoba	2,508,000
Litoral	3,513,000
Tucumán	742,000
Total	19,272,000 ¹

¹ The exchange rate at present is about 2.46 pesos to the \$1.

The following table gives the faculties in each of the universities:—

Medicine (including medicine, dentistry, pharmacy, midwifery, and allied studies) at Buenos Aires, Cordoba, Litoral, and La Plata.

Law (including law, social sciences, notarial preparation, and allied studies) at Buenos Aires, Cordoba, Tucumán, Litoral, and La Plata.

Mathematics (including engineering in various branches, architecture, and pure sciences) at Buenos Aires, Cordoba, Tucumán, Litoral, and La Plata.

Philosophy and Letters at Buenos Aires and La Plata (faculty of humanities and educational sciences).

Economic Sciences at Buenos Aires and Litoral.

Agriculture at Buenos Aires (including veterinary science), Litoral, and La Plata.

Education at Buenos Aires (included in the faculty of philosophy and letters), Litoral, and La Plata.

Pharmacy at Tucumán.

Chemistry and Pharmacy at La Plata.

Industrial and Agricultural Chemistry at Litoral.

Veterinary Medicine at La Plata.

Each university draws up the curriculum for each of its schools or faculties and some differences may exist in the requirements of the same faculty in the different universities. Since the elective system is unknown, all the students of the same faculty must follow the same curriculum. The abolition of compulsory attendance makes it possible for a student to obtain a degree without attending lectures. Regular attendance is, however, required for laboratory work.

The following table gives the enrollment by faculties in each of the five universities:

UNIVERSITY	BUENOS AIRES			CORDOBA		TUCUMÁN		LITORAL		LA PLATA	
Faculties	M.	M. and W. ¹	W.	M.	W.	M.	W.	M.	W.	M.	W.
Medicine . . .		4265		1109	124	—	—	1186	177	374	2
Law		1246		356	6	—	—	330	9	524	7
Mathematics .		938		116	3	17	1	153	—	191	1
Economics . .	422		4	—	—	—	—	68	5	—	—
Agriculture . .	285		1	—	—	—	—	58	—	134	1
Chemistry and pharmacy . .		463		—	—	27	22	34	1	189	56
Education . .	97		122	—	—	—	—	29	45	159	115
Totals . . .	804	6912	127	1581	133	44	23	1858	237	1571	182

¹ Numbers for each sex not reported.

In 1925 the total number of degrees granted in all the universities was 1591, including 370 in medicine, 195 in law, 152 in pharmacy, 96 in dentistry, 95 in all branches of engineering, 91 in veterinary science, and 41 in agriculture. About 10 per cent of the students who obtained degrees were foreigners.

The professors were distributed as shown in table, page 17.

Entrance requirements. — Admission to the universities is based on the completion of the curriculum of the secondary school. The universities of Buenos Aires, Cordoba, and La Plata conduct their own secondary schools, with a course of

UNIVERSITY	ARGENTINIANS	FOREIGNERS	TOTALS
Buenos Aires	557	60	617
Cordoba	101	14	115
Tucumán	12	5	17
Litoral	234	18	252
La Plata	171	22	193
Totals	1075	119	1194

six years in the Buenos Aires school and an extension to six years planned in the other two, and with a curriculum somewhat different from that of the regular schools; the graduates of these schools are admitted to the universities without further requirements. Students who graduate from the ordinary national secondary schools are required to submit to an entrance examination in subjects that vary with the faculty to which admission is desired. The following figures give the results of the entrance examinations to three faculties in 1925, figures which seem to indicate that the entrance examination is a device intended to keep down the number of admissions.

FACULTY	TOTAL CANDIDATES	PASSED	FAILED
Law	1061	792	269
Medicine	1108	753	355
Mathematics	186	136	50

SECONDARY EDUCATION

Secondary schools and the universities. — The fact that secondary schools are the only gateways to the university has had a marked influence upon the character of this branch of public education in Argentina. Although secondary education is, according to the best theory, stated to be an agency

of general education to fit the adolescent for life, practically no student enters the secondary school without the idea of ultimately entering the university. The university career being exceptionally attractive, the secondary school has become an institution that prepares solely for the university.

From time to time manual training, agriculture, arts, and crafts have been added to the curriculum, but with little avail; as elective subjects no student would take them, while, if required of all students, public opinion would at once ridicule the idea of making these subjects prerequisites for admission to the universities.

Secondary education being free, the number of students is growing apace. From 3200 in 1900 the number has increased in twenty-five years to 24,250; of the total 86 per cent are boys. In order the better to realize the extent to which the university, and consequently the secondary school, lures the adolescent, the following table showing the schools attended by boys and girls of the age of sixteen is presented:

KINDS OF SCHOOLS	BOYS' SCHOOLS	GIRLS' SCHOOLS
Secondary	3502	704
Normal	318	2876
Commercial	413	189
Industrial	372	820
Sunday	121	191
Totals	4726	4780

The total number of sixteen-year olds is 128,500 (61,426 boys and 67,129 girls).

These figures are important, first, as showing what the educational destinies will be of each of the successive groups of children born in the same year and educated under the present system; and second, as indicating roughly the per-

centage of cultured people among the Argentine population. The state is confronted with the paradox that, while it is claimed that the secondary curriculum is an all-round preparation for life, the state has instituted a careful selection of the students during their secondary school years, a selection evidently directed to secure the right type of candidates for admission to the university. How effective this selection is may be judged from the following figures giving the enrollment in the secondary schools by years :

First Year	7,634
Second Year	5,911
Third Year	4,206
Fourth Year	3,757
Fifth Year	2,724
Total	24,232

The selection is made on a qualitative basis through examinations and other means of ascertaining the preparation of the pupils. But in view of the enormous numbers of candidates for admission to the universities, the authorities have to resort to a purely quantitative reduction in the numbers. Thus those responsible for the administration of secondary education are very reluctantly compelled to refuse admission to the universities to students who show lack of ability in some subjects; the secondary school curriculum is prescribed for all, and failure in one subject, however remote from the subjects that the student will pursue in his university course, may cause the rejection of a candidate.

It is also unfortunate that the all-absorbing task of clearing the ranks of university candidates should affect the introduction of certain modern tendencies which are thus barred from adoption in the secondary schools of the country. Such tendencies are the following: a broader conception of education; a more sympathetic attitude to individual differences;

the need of providing a larger number of opportunities for the expression of abilities ; the need of enriching school life by the introduction of tasks that have a greater appeal and are more interesting. The introduction of all these modifications would mean a larger attendance and a diminished school " mortality." While the lure of the university continues, none of these characteristics of modern education can safely be a part of the educational policy in the secondary school system.

Another danger affects the efficiency of the system, and that is the general belief, cynically expressed by some students, that whatever the defects of its teaching, the secondary school gives something more interesting than the actual lessons — the golden key to the university. This conviction is undoubtedly at the bottom of the uncritical attitude to the secondary schools on the part of students, parents, and public ; and since this attitude has in the past been shared by the authorities themselves, the result has been indifference to the real defects both of the system and its methods.

The fact is, however, that for a number of historical and social reasons, the secondary school is not yet a neutral field where students may go in search of the intrinsic values of education, and where the state might place its unlimited possibilities at the service of the boys and girls of the country, whatever their limitation.

Organization of secondary schools. — The establishment of secondary schools or *colegios nacionales* in 1863 by President Mitre responded to a political necessity, that of offering to the fourteen provinces the opportunity of discovering their future leaders and of preparing them for higher cultural pursuits at the Universities of Buenos Aires and Cordoba. Thus the function of these universities was to serve as centers where the élite of the whole country might receive a common

inspiration in order to counteract the forces that worked for dissension at that critical time.

Since that year the number of secondary schools as well as their population has grown considerably :

YEAR	SCHOOLS	ENROLLMENT
1865	8	515
1875	14	1,928
1885	15	2,418
1895	18	3,247
1905	21	4,609
1915	32	11,123
1925	46	19,502

The above list includes only public secondary schools ; of the forty-six schools in 1925 nine are in the city of Buenos Aires and one of them, founded in 1907, is for girls and had an enrollment of 964. As has already been mentioned, there are two kinds of secondary schools, both called public ; there are those controlled by the Minister of Public Instruction, and those administered by the Universities of Buenos Aires, Cordoba, and La Plata. The fact, however, that some of the schools are under university control does not affect the character of the rest as preparatory institutions for the universities. The difference between the two types is that those students who come from the schools under the control of the Minister of Public Instruction are required to pass an entrance examination if they wish to enter a University.

- The total enrollment in the three schools attached to the Universities is 3647, distributed as follows : Buenos Aires, 1328 ; Cordoba, 1147 ; and La Plata, 1172.

Private secondary schools. — Side by side with the public secondary there have always existed private secondary schools, often under the control of religious organizations and of the boarding school type. It is only of late that

socially minded individuals have interested themselves in the maintenance of up-to-date educational institutions. The following figures indicate the development of private secondary education in the past ten years :

YEAR	SCHOOLS	BOYS	GIRLS	PROFESSORS
1915	40	3293	56	482
1925	70	4611	119	716

The small number of girls enrolled in the secondary schools, which is striking, may be explained by the fact that secondary education for girls is a comparatively recent development.

A private secondary school is always annexed, or "incorporated," to an official one, which examines its pupils. All other supervision on such matters as qualifications of teachers, condition of school buildings, quality of teaching is under the charge of the Inspector-General of Secondary Education. The "incorporation" may be discontinued in the case of unsatisfactory conditions. Incorporation confers official validity on the diploma of a private school.

"Free" students. — The secondary school system offers students the opportunity of pursuing secondary studies without attending any particular school. Any student possessing the diploma of elementary education may present himself for examination in the subjects of the secondary school curriculum, no time limit being set for the completion of the whole program. Examinations are held twice a year, at the close and at the beginning of the school year. There are about 4000 "free" students.

Secondary school curriculum. — Secondary education lasts five years and consists of the following curriculum which

is uniformly applied throughout the Republic with certain modifications both in time and content in the three university secondary schools :

SUBJECT	1 Yr.	2 Yr.	3 Yr.	4 Yr.	5 Yr.
Spanish	6 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.
French	4 hrs.	3 hrs.	3 hrs.	2 hrs.	—
English	—	4 hrs.	4 hrs.	3 hrs.	—
Italian	—	—	—	2 hrs.	3 hrs.
History	4 hrs.	4 hrs.	3 hrs.	3 hrs.	4 hrs.
Civics	—	—	—	—	3 hrs.
Geography	2 hrs.	3 hrs.	4 hrs.	2 hrs.	—
Mathematics	5 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.
Science	—	3 hrs.	3 hrs.	8 hrs.	10 hrs.
Psychology	—	—	—	3 hrs.	—
Logic	—	—	—	—	3 hrs.
Drawing and writing .	3 hrs.	2 hrs.	2 hrs.	—	—
Music	2 hrs.	2 hrs.	—	—	—
Physical exercise . .	4 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.
Total	30 hrs.	32 hrs.	30 hrs.	34 hrs.	34 hrs.

Notes on the curriculum. — Spanish in the first three years consists of instruction in language; in the last two years the time is devoted to the study of Spanish literature. The course in history includes ancient history in the first year, medieval and modern in the second, history of the Western Hemisphere and the Argentine Republic in the third, history of Argentina in the fourth, and a general survey of the history of civilization and culture in the fifth. Mathematics includes arithmetic and geometry in the first year, the same with accounting in the second, algebra and geometry in the third, algebra and solid geometry in the fourth, and trigonometry and cosmography in the fifth. Science begins with zoölogy and botany in the second and third years, followed by anatomy and physics in the fourth, and chemistry, mineralogy and geology, and physiology and hygiene in the fifth. Geography covers the four continents

in the first two years, and the Western Hemisphere and Argentina in the third and fourth years.

This curriculum is controlled by the Minister of Public Instruction and is also obligatory for all private schools under the supervision of this department. The secondary schools attached to the Universities of Buenos Aires, Cordoba, and La Plata have curricula of their own. The school of the University of Buenos Aires has a six-year course and is the only public school in the country that includes Latin in its curriculum.

Secondary school teachers. — Teachers for the secondary schools are prepared in the following institutions: National Institute for Secondary Teachers; Faculty of Philosophy and Letters, University of Buenos Aires; Normal School for Professors; Normal School of Modern Languages; School of Sciences; University of the Litoral; Faculty of Humanities and Educational Sciences, University of La Plata; National Institute of Physical Education; and National Academy of Fine Arts. In addition any university graduate may be appointed to teach a subject included in his studies.

DIPLOMAS	NUMBER
Normal schools	
Teachers	165
Professors	164
Institute for secondary teachers	354
University	
Doctors: Philosophy and letters	43
Law	369
Medicine	164
Engineers	104
Others	140
Other diplomas	
Argentine	143
Foreign	101
Without diplomas	296
Total (including duplications)	2043

After five years of successful teaching in a secondary or normal school, such a teacher may obtain on request a diploma as a secondary school professor. Those who do not hold any diploma are entitled to the same recognition after ten years of successful experience in secondary schools.

About 85 per cent of those teaching in secondary schools possess some kind of diploma. (See table, page 24.)

The following table gives the nationality, sex, total number of hours of work, and the amount paid in salaries to secondary school teachers:

	MEN	WOMEN	NATIVE	FOREIGN	HOURS PER WEEK	TOTAL ANNUAL SALARIES, PESOS
Buenos Aires .	766	173	841	98	6,866	3,853,000
Rest of country .	843	108	817	134	8,132	4,197,000
Total . . .	1609	281	1658	232	14,998	8,050,000

Salaries are the same for men and women and are paid according to the following system: A *cátedra* or chair is the name given to a teaching assignment covering six hours a week. This salary unit has now been abolished and all teaching assignments are to-day reckoned by hours of work on the following scale: The yearly salary for each hour of teaching per week for sciences or letters is 504 pesos, for languages 476 pesos, and for music, drawing, physical exercises, etc., 448 pesos.

Tenure of office. — Secondary school professors are appointed by the President of the Republic on the recommendation of the Minister of Public Instruction; the appointment is made by decree bearing the Minister's signature. Professors can be suspended by the Minister, but only a Presidential decree, bearing also the signature of the Minister, can deprive them of their posts.

Pensions. — A Retirement Law provides that any national employee may retire after 30 years of service on a pension of ninety-five per cent of the average salary received during the last five years of service. For this purpose a deduction of five per cent is made from the salary of every employee in the national service.

PRESCHOOL AND KINDERGARTEN EDUCATION

The kindergarten flourished in the Argentine Republic for a short time after Sarmiento brought from the United States a group of enthusiastic young kindergarten teachers who incorporated the movement into the educational system. Their work and methods, however, seem to have lacked the infusion of modern ideas, with the result that the public lost interest and failed to support the work.

At present there are fourteen kindergartens in the whole country with an enrollment of 1300 children. The kindergartens belong to the normal school system.

ELEMENTARY EDUCATION

The present Elementary School Law dates from 1884. Although the Act refers only to the city of Buenos Aires and the national territories, its provisions have been adopted by most of the provincial governments in making their educational laws. The chief features of the Act are the following: The aim of the elementary school is stated to be the moral, intellectual, and physical education of children from six to fourteen. Elementary education is compulsory, secular, and free, books and materials being given to poor children, who are also exempted from the small matriculation fee of one peso. The minimum course must include: reading, writing, arithmetic, language, history, geography, civics, moral instruction, hygiene, natural history, drawing, music,

and physical exercises. For girls domestic science is added to the curriculum.

Administration. — Each province controls its own elementary education, and the federal constitution merely provides for this autonomy. The consequence is that there are variations from province to province in such matters as school age and qualification of teachers. Thus in the province of Buenos Aires the school requirement extends only over four years and the school age begins at eight and ends at twelve. The provinces of Entre Rios, Tucumán, San Juan, San Luis, and La Rioja have adopted six to fourteen as the official school age. In some other provinces the school age varies according to sex.

At the head of the school system of the city of Buenos Aires and the National Territories is the National Council of Education consisting of five members appointed by the President of the Republic. The Council draws up the annual budget, which must be approved by the Minister of Public Instruction and be passed by Congress as part of the general national budget. The Council approves the course of study for the schools under its control, administers the properties, and appoints the personnel.

The Council is assisted by district councils composed of "five fathers of families," appointed by the Council for a period of two years. The district councils are expected to look after the hygiene, discipline, and moral tone of the schools. They prosecute truants and furnish poor children with clothing, for which purpose they use the proceeds of the matriculation fees; they establish night schools for adults, promote coöperation between the schools and the public, and submit to the Council *ternas* for the appointment of teachers, assistant principals, and principals.

Organization. — Elementary schools are divided into three categories: infant, elementary, and superior. The

infant schools contain only the first and second grades; the elementary type contains all grades up to and including the fourth; and superior schools are complete six-grade schools. The first two categories are coeducational. Although elementary education consists of six grades, both the first and second grades are divided into two sections each, so that it usually takes eight years to complete the course. Special classes have recently been organized for abnormal children.

The school day lasts three hours and twenty minutes and the school year extends from the first Monday of March to the end of November. The schools are open in the mornings and afternoons, but the two sessions are attended by different groups of pupils; in other words, the schools are organized on the double-shift system. The large majority of the buildings in the country are rented; in the city of Buenos Aires 130 of the 200 school buildings were specially built for the purpose.

The selection of textbooks is in the hands of a committee of inspectors who submit a list of books for approval by the Council. From the approved list the school principals and teachers select those that they wish to use.

Inspection and supervision. — The inspection staff of the National Council is under a General Inspector and consists of three inspectors-general — one for Buenos Aires, one for national schools in the provinces, and one for schools in the national territories. Each of these is assisted by regional inspectors. There are in addition inspectors of night schools, of schools for illiterates in the army, of private schools, and of special subjects like music, drawing, manual work in day and night schools, and household arts and household management.

Special function of elementary schools. — The authorities realize that one of the special functions of the Argentine school is to counteract the disintegrating influences of cos-

mopolitanism. There is in the curriculum, therefore, a marked tendency to emphasize the national aspects of life, particularly in the fields of geography and language. Special occasions have been set aside by the authorities for the expression of patriotic sentiment, as, for example, May Week to commemorate the beginning of Independence; Flag Day; Memorial Day in memory of those who died for their country; and Day of Historical Americans.

Side by side with this national spirit there has developed an interesting continental spirit, tending to inculcate love and respect for other countries of the Continent. Thus twenty schools in Buenos Aires have been given the names of as many American Republics; each of these schools displays a flag of the nation whose name it bears. This activity is reciprocated in other Latin-American lands where a number of "Argentine Republic" schools have sprung up. This reciprocity in turn stimulates an interest in the geography and peoples of the country concerned and has also led to the development of an interchange of pupil correspondence. Out of this movement has developed the celebration of "American Week."

School festivals are common, the following special days being observed: Day of Humanity (first day of spring); Race Day (October 12, celebrating the discovery of America and commemorating the Latin race); Home Day (closing day of school); Arbor Day; Animal Day.

Postal savings have been instituted by law; deposits made by children amount to about half a million pesos.

Elementary school statistics. — The population of school age between 6 and 14 in Buenos Aires is estimated at 331,000, of whom 250,800 were enrolled in public and private schools; that is, 75.7 per cent of children of school age are in school. The probability is, however, that the percentage of children receiving elementary education is higher; the figure given

above represents the percentage of those attending school at any one time. Children stay in school but a very short time and the eliminations begin after the age of seven. Thus the relation of pupils at different ages, if 100 be taken to represent those at seven, would be as follows:

AGE	NUMBER	AGE	NUMBER
6	88	10	84
7	100	11	72
8	98	12	60
9	89	13	39

Teachers. — Teachers' certificates that are required in order to secure appointments in elementary schools are granted by the national or provincial normal schools.

Salaries. — The salaries of teachers, principals, and supervisors are as follows:

	PESOS PER MONTH		PESOS PER MONTH
Supervisors	700	Teachers, first category	312
Principals, superior school .	380	Teachers, second category	280
Principals, elementary school	360	Teachers, third category	266
Assistant principal	312		

The categories are not reached by any automatic or objective device, but are drawn up by a special committee of supervisors from time to time. There is, however, a movement to establish fixed principles of promotion. Principals of superior schools usually have living quarters in the school or else receive an allowance of sixty pesos a month.

Pensions. — A pension of ninety-five per cent of the average salary earned in the last five years of service is paid to teachers retiring after twenty-five years of service.

Private schools. — Private schools are subject to supervision by either the National Council (in Buenos Aires and the National Territories) or by the provincial school authorities. When first established a private school must comply with certain requirements as to hygiene, space, etc. After this the school must keep the authorities informed periodically as to the attendance of pupils and must be open to inspection. Instruction in the private schools must follow the official courses of study.

Tendencies. — The province of Buenos Aires has developed school gardens; Corrientes emphasizes manual training; Entre Rios is noted for the excellent organization of schools in agricultural settlements; Cordoba has introduced a system by which all teachers elect members of the provincial council. Interest is being shown in reform movements generally, and especially in the active methods. Unfortunately the extensive introduction of new methods necessitates too many radical changes with the result that failure is always imminent. Thus the introduction of the Decroly system by the school authorities in the province of Santa Fé failed for this reason.

TRAINING OF TEACHERS

The normal schools for the training of teachers correspond to a certain extent to the secondary schools in the matter of the curriculum. Conditions of admission are the same, namely, the completion of the elementary schools, but with the added requirement that candidates must be at least fourteen years of age. Fundamentally the function of the normal schools is to train teachers for the elementary schools, and to prepare professors for the normal schools, some of whom also teach in secondary schools.

There are four kinds of normal schools: (1) Normal schools for preceptors, giving a course of two years. Graduates from these lower normal schools may teach in elementary rural

schools and may become principals of such schools. (2) Normal schools for teachers, giving a four-year course, the first two of which are identical with those of the lower normal schools. Graduates from these schools may teach in elementary and normal schools, may become principals of elementary schools, and after eight years of experience as teachers in normal schools are eligible to principalships of normal schools. (3) Normal schools for professors, offering a seven-year course, the first four years being identical with those of the normal schools for teachers. One normal school in this class is specially devoted to the teaching of modern foreign languages. (4) Forming a class by itself is a National Institute for the preparation of teachers for secondary schools.

All normal schools have training schools attached to them with a six-year course, while the National Institute uses one of the secondary schools in Buenos Aires for this purpose.

Curriculum. — The following tables present the curriculum and time distribution first of the four-year normal

CURRICULUM AND TIME DISTRIBUTION OF THE FOUR-YEAR NORMAL SCHOOLS

	1 Yr.	2 Yr.	3 Yr.	4 Yr.
Spanish	4 hrs.	4 hrs.	3 hrs.	2 hrs.
French	3 hrs.	3 hrs.	2 hrs.	2 hrs.
Mathematics	5 hrs.	4 hrs.	3 hrs.	2 hrs.
History	3 hrs.	3 hrs.	3 hrs.	3 hrs.
Civics	—	—	—	2 hrs.
Geography	2 hrs.	2 hrs.	3 hrs.	3 hrs.
Science	2 hrs.	2 hrs.	7 hrs.	5 hrs.
Music	2 hrs.	2 hrs.	1 hr.	1 hr.
Manual work	2 hrs.	2 hrs.	1 hr.	—
Household arts	—	—	—	1 hr.
Drawing	2 hrs.	2 hrs.	1 hr.	1 hr.
Physical exercise	2 hrs.	2 hrs.	2 hrs.	2 hrs.
Pedagogy and methods	2 hrs.	3 hrs.	2 hrs.	—
Observation and practice teaching	1 hr.	2 hrs.	3 hrs.	3 hrs.
Psychology	—	—	—	2 hrs.
Hygiene and child care	—	—	—	3 hrs.
Total	30 hrs.	31 hrs.	31 hrs.	32 hrs.

CURRICULUM AND TIME DISTRIBUTION IN THE SECTION OF LETTERS FOR PROFESSORS

	5 Yr.	6 Yr.	7 Yr.
English	5 hrs.	5 hrs.	4 hrs.
Literature	4 hrs.	4 hrs.	4 hrs.
History	4 hrs.	4 hrs.	—
Geography	3 hrs.	—	—
Political economy	3 hrs.	—	—
Common law	—	3 hrs.	—
Historical grammar	—	—	4 hrs.
Reading and elocution	1 hr.	1 hr.	1 hr.
Logic	—	—	3 hrs.
Psychology	—	3 hrs.	—
Nervous system	2 hrs.	—	—
History of education	—	2 hrs.	—
School legislation	—	—	3 hrs.
Practice teaching	3 hrs.	3 hrs.	3 hrs.
Hygiene	—	—	3 hrs.
Total	25 hrs.	25 hrs.	25 hrs.

schools and then of the three-year courses that follow for the preparation of professors; the latter are divided into two sections, one for letters and the other for sciences.

In this program literature includes ancient, European, and Argentine and American; history covers the history of civilization and of the Argentine Republic; and geography includes the general field.

CURRICULUM AND TIME DISTRIBUTION IN THE SECTION OF SCIENCES FOR PROFESSORS

	5 Yr.	6 Yr.	7 Yr.
Sciences	9 hrs.	8 hrs.	6 hrs.
Mathematics	6 hrs.	6 hrs.	4 hrs.
English	3 hrs.	3 hrs.	3 hrs.
Geography	3 hrs.	—	—
Psychology	—	—	3 hrs.
Nervous system	—	2 hrs.	—
Hygiene	—	—	2 hrs.
History of education	—	2 hrs.	—
School legislation	—	—	3 hrs.
Practice teaching	3 hrs.	3 hrs.	3 hrs.
Total	24 hrs.	24 hrs.	24 hrs.

The Normal School for Foreign Languages, whose object is to prepare teachers of English and French for normal and secondary schools, has a curriculum similar to that of the regular normal schools for the first four years of the course. Most of the classes are conducted in either French or English. Here only the curriculum and time distribution of the last three years of the course for professors are given :

	5 Yr.	6 Yr.	7 Yr.
French (or English)	8 hrs.	7 hrs.	7 hrs.
Literature ¹	4 hrs.	4 hrs.	4 hrs.
History ¹	—	2 hrs.	—
Geography ¹	2 hrs.	—	—
History of language ¹	—	—	3 hrs.
Phonetics	—	2 hrs.	—
Orthophony	3 hrs.	—	—
Spanish and Argentine literature	2 hrs.	2 hrs.	—
History, ancient	—	—	2 hrs.
History of education	—	3 hrs.	—
Psychology	—	—	3 hrs.
Pedagogy and observation	5 hrs.	—	—
Practice teaching and criticism	—	4 hrs.	6 hrs.
Total	24 hrs.	24 hrs.	25 hrs.

¹ In each case of the country in whose language the student specializes.

The following table gives the statistical development of the normal schools since 1900 :

	1900				1920				1925			
	BUENOS AIRES		REST OF COUNTRY		BUENOS AIRES		REST OF COUNTRY		BUENOS AIRES		REST OF COUNTRY	
	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students
Two Year	—	—	—	—	—	—	11	408	—	—	12	428
Four Year	—	—	18	860	8	2879	54	7,350	9	2259	55	8,007
Seven Year	3	716	7	609	3	1579	7	2,298	3	1323	6	1,729
Total	3	716	25	1469	11	4458	72	10,056	12	3682	73	10,164

A considerable fall in the enrollment in the normal schools in Buenos Aires may be noticed in 1925. The reason for this was that overproduction of teachers had left about 7000 teachers without the opportunity of obtaining employment. The following figures permit a comparison between the enrollment in the lower normal schools and that in the professorial departments in 1925, as well as the proportion between the sexes :

	MEN	WOMEN	TOTAL
First Year	736	3,297	4,033
Second Year	575	2,710	3,285
Third Year	424	2,644	3,068
Fourth Year	426	2,473	2,899
Fifth Year	31	152	183
Sixth Year	35	113	148
Seventh Year	30	100	130
Total	2,257	11,489	13,746

Private normal schools. — There are thirty-eight private normal schools, of which fourteen are in Buenos Aires. Their organization and relations with the educational authorities are similar to those of private secondary schools. The enrollment in 1925 in these schools was as follows : first year, 1442 ; second year, 806 ; third year, 692 ; fourth year, 548 ; total, 3488. Of the total enrollment only about $3\frac{1}{2}$ per cent were men.

Normal school teachers. — There were, in 1925, 2155 professors teaching in public and 576 teaching in private normal schools. Of the 2155 professors in public normal schools 911 were men and 1244 women ; 1974 were natives and 181 foreigners. The work of these teachers amounted to 18,000 hours a week at an annual cost of 8,750,000 pesos. Only 260 of them held no diploma ; the rest had the qualifications shown in the table on page 36.

Normal diplomas	
Teachers	759
Professors	480
Secondary schools	
Professors	110
University diplomas	
Lawyers	127
Ph.D.	30
Physicians	120
Engineers	39
Others	110
Other diplomas	
National	188
Foreign	77
No diplomas	260
Total (including duplications)	2300

In the training schools attached to the normal schools ninety per cent of the teaching body were certified. This body consists either of professors (117) or of primary teachers (904), or of teachers holding other diplomas (24). Only 126 had no diploma.

In the matter of salaries and tenure of offices the condition of the professors in the normal schools is the same as of those in secondary schools.

Institute for Secondary Professors. — The function of this Institute is to prepare professors for secondary schools as well as for normal and special schools. The courses vary according to the special field selected by the students. The following examples will serve to indicate the character of the courses, all of which are four years in length:

Spanish. — First year: Latin and Latin literature; Spanish and Spanish Literature; Italian and French literature.

Second year: Latin and Latin literature; Spanish and Spanish literature; English and German literature; general pedagogy.

Third Year: Latin and Latin literature; Greek and Greek literature; Spanish, American and Argentine literature; historical grammar; psychology, pedagogy, and observation of teaching.

Fourth Year: Latin and Latin literature; Greek and Greek literature; historical grammar; history of art; history of education; methods and practice of teaching.

Modern Languages (French, English, or Italian). — First year: Language (reading, orthography, conversation, composition, translation); modern grammar; phonetics.

Second year: Language as in previous year; phonetics; literature of the language chosen; history of the culture of the country concerned; general pedagogy.

Third year: Language (oral and written compositions); literature and history of culture as above; history of the language studies; psychology, pedagogy, and observation of teaching.

Fourth year: Language, literature, and history of culture as above; history of education; methods and practice of teaching.

History. — First year: Prehistory and archæology of Argentina and America; Argentine and American history with preseminar exercises.

Second year: Argentine and American history and seminar; history and geography of the Orient and Greece; preseminar in universal history; general pedagogy.

Third year: Argentine and American history and seminar; history of Rome and the Middle Ages and seminar; anthropogeography; political, economic, and statistical geography; psychology, pedagogy, and observation of teaching.

Fourth year: Historical method; modern and contemporary history; general sociology; political and economic geography of Argentina; history of education; special method and practice teaching.

Physics. — First year: Mathematical analysis; metrical geometry; trigonometry; experimental physics; laboratory.

Second year: Analytical geometry; mathematical analysis; experimental physics; laboratory; general pedagogy.

Third year: Mathematical analysis and analytical geometry; experimental physics; laboratory; psychology, pedagogy, and observation of teaching.

Fourth year: Mathematical physics and rational mechanics; physical and general chemistry; history of education; methods and practice of teaching.

ADULT EDUCATION

Illiteracy. — In spite of the efforts of the national and provincial governments the number of illiterates in the country amounts to twenty-five per cent. The percentage is highest in the remote provinces and in the national territories; in Buenos Aires the percentage has been reduced considerably and amounts to only two or three per cent.

Adult schools. — Elementary schools for adults are in operation in elementary school buildings, armories, warships, and jails. The main part of their work is (1) with young men about twenty years of age serving their terms of military service, and (2) with immigrants. In 1925 in both the army and the navy 7537 soldiers and sailors attended these schools which aim to reduce the percentage of illiteracy. Adult elementary schools are generally night schools and are intended chiefly for immigrants who are employed during the day and are exempted from the law of compulsory school attendance. In Buenos Aires there are 82 such schools.

VOCATIONAL EDUCATION

Industrial training in elementary schools. — Over 95 per cent of those who complete the elementary schools in Buenos Aires proceed to some higher institution — 61 per cent enter secondary schools; 28 per cent go to higher commercial

schools; and 11 per cent enter the higher industrial schools. The absence of a surplus of elementary school graduates going to trades and other occupations explains why so little industrial work is provided in the elementary schools.

This means that the more than 70 per cent of the pupils who drop out of the schools without completing the work leave without any serious preparation for life. To meet this problem attempts have been made from time to time but without success to introduce manual training into the elementary schools.

In the provinces where higher education beyond the elementary schools is not as readily accessible as in the capital, about half of the pupils who graduate from the elementary schools abandon all studies. For this reason and because 96 per cent of the pupils drop out of school before reaching the sixth grade, manual activities and gardening are finding their way into the schools. This is particularly true in the so-called national schools in the provinces, which are located in rural districts and have only four grades. The work here is along practical lines and consists in making useful articles in wood, straw, leather, metal, etc.

Lower industrial schools. — These schools, which are public and private, are intended for pupils who drop out of the elementary schools at an early age. (1) The public schools, called schools of arts and trades, are administered by the Ministry of Public Instruction and are found throughout the country. They receive pupils, especially boys over twelve years of age, who have completed at least the third grade of the elementary school. There are 29 such schools offering courses during the day, varying to a certain extent with the needs of their localities. The work is based on the common elementary industries employing wood, leather, metals, clay, etc. The total enrollment in these schools is 1560. (2) Private schools are provided mainly by the Sa-

lesian Fathers, who have developed a system of schools and arts and trades that now number ten and have an enrollment of about 10,000. The schools are distributed in different parts of the country. The courses are of a practical character and include hand and power training in carpentry, tailoring, shoemaking, blacksmithing, sculpture, instrumental music, and printing. Some of the schools specialize in agriculture.

Intermediate industrial schools. — These schools prepare boys who have not completed the course of the elementary schools to be skilled artisans or foremen. Pupils are admitted to the two public schools of this type between the ages of 14 and 17; the course is five years in length. One of the schools prepares mechanics for the navy and the other for the army. Under certain conditions the graduates may enter private employment. The last year of the course for the navy is spent on shipboard. For the army school the War Department grants about two hundred scholarships to young men between sixteen and twenty-one, who are selected by examining commissions sent to different parts of the country.

A number of private schools of this type are provided by the Society for Industrial Education. These schools include the following: school for mechanics and electricians; school of drawing; school of industrial chemistry; school for radio operators; school for internal combustion motors; and short course in elementary electricity.

Another private institution of importance is the School for Mechanics and Draftsmen which prepares mechanics for the merchant marine and even for the navy.

Secondary industrial schools. — These schools are of secondary school standing and require the completion of the elementary school. They are known as higher national industrial schools. They are five in number, three of them

under the Ministry of Public Instruction and two connected with the Litoral University. In general the courses last six years; the first four years are devoted to general instruction and fundamental technical training; in the last two years specialization is provided in chemistry, electricity, mechanics, and building. The total enrollment in these schools is 2010 students.

At San Luis there is a small school of chemical industries (formerly the school of mines) with an enrollment of 60 students.

Trade schools for girls. — These schools are organized on the same lines as the *Ecoles Professionnelles* in France and Belgium and are known as *Escuelas Profesionales*. They are open to girls over thirteen years of age who have completed the first four years of the elementary school. The following special courses are available, each of which includes drawing :

COURSE	YEARS	COURSE	YEARS
Embroidery	4	Artificial flowers	3
Linen work	3	Gold embroidery	3
Lacemaking	4	Millinery	3
Dressmaking	5	Jewelry	4
Weaving	4	Bookbinding	3
Telegraphy	1	Painting, drawing, and decorative arts	4

There are nineteen of these schools, six of them being in Buenos Aires, with an enrollment of 5120 and 261 teachers.

The administration of the Capital in order to promote the native art of weaving, which once flourished so widely in South America, has established a summer school of weaving for elementary school teachers; the course lasts two years and is attended by 120 teachers.

Continuation schools. — The higher national industrial schools in Buenos Aires and La Plata offer night courses for

workmen. Those who have already completed their education enter at once on a trade course; those who are not so prepared enter the preparatory courses giving practical arithmetic, geometry, projective drawing, lettering, mechanical drawing, and hygiene or first aid.

The technical courses cover adjusting, machine mounting, preparation for machine workers, engine drivers, stokers, firemen, electricians, masons, carpenters, art metalwork, cabinet making, etc.

The Argentine Institute of Graphic Arts, founded in 1907, offers evening courses to young workmen over sixteen who have completed the first three years of elementary school. The courses include linotype, typesetting, lithography, bookbinding, drawing, etc., and vary in length from two to five years. The enrollment is about three hundred.

The National Council of Education has organized a number of courses known as complementary schools intended for those who have completed the elementary school course. There are ninety-nine such schools in Buenos Aires, offering the following courses: reading, drawing, writing, language, mathematics, history, geography, civics, nature study, and anatomy and physiology. The special courses are dress-making, weaving, embroidery, knitting, home economics, French, English, Italian, applied design, shorthand, typewriting, and accounting for women; and accounting, shorthand, typewriting, French, English, Italian, mechanical and decorative drawing, telegraphy, electrotechnics, and industrial chemistry for men. The classes meet three evenings a week for two hour sessions.

The institutions, known as "popular universities" and largely attended by adults, are really vocational night schools offering courses in accounting, drawing, shorthand, typewriting, and millinery as well as in dairying, canning, etc. Seven of the most important of such "universities"

offer an aggregate of eighty-one courses with an attendance of 7000 students, of whom 15 per cent are foreigners, and employ 127 teachers.

COMMERCIAL EDUCATION

There are nine higher commercial schools under the Minister of Public Instruction. The curriculum and weekly time distribution of the course for commercial specialists is as follows:

	1 Yr.	2 Yr.	3 Yr.	4 Yr.	5 Yr.
Accounting	3 hrs.	3 hrs.	4 hrs.	4 hrs.	6 hrs.
Business organization . . .	—	—	—	3 hrs.	—
Commercial law	—	—	—	—	3 hrs.
Political economy	—	—	—	—	2 hrs.
Economic legislation . . .	—	—	2 hrs.	2 hrs.	—
Commercial wares	—	—	—	5 hrs.	5 hrs.
Shorthand	—	—	—	—	2 hrs.
Typewriting	2 hrs.	2 hrs.	2 hrs.	—	—
Penmanship and drawing .	3 hrs.	2 hrs.	—	—	—
Language	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.
French or English	5 hrs.	5 hrs.	3 hrs.	3 hrs.	3 hrs.
Geography	3 hrs.	3 hrs.	3 hrs.	2 hrs.	2 hrs.
History	3 hrs.	3 hrs.	3 hrs.	2 hrs.	2 hrs.
Civics	—	—	—	2 hrs.	—
Mathematics	6 hrs.	5 hrs.	5 hrs.	4 hrs.	3 hrs.
Physics	—	3 hrs.	—	—	—
Chemistry	—	—	2 hrs.	—	—

The enrollment was 2775, including 926 women; these include 740 students in the Buenos Aires Women's Council School. The provincial schools are coeducational. The schools also offer courses for typists (one year), commercial secretaries (2 years), experts in penmanship (2 years), certified clerks (3 years), accountants (4 years), and bookkeepers (4 years).

The universities of Buenos Aires and of the Litoral have departments of economic sciences that prepare for the doctor-

ate in economic sciences, public accountancy, and the consular service. The enrollment was as follows:

	BUENOS AIRES	LITORAL
Doctorate in economic sciences	336	36
Public accountancy	70	17
Consular service	2	14

Both departments have preparatory sections which are similar to the higher commercial schools and have an enrollment of 2834 students, including 64 women.

AGRICULTURAL EDUCATION

Reference has already been made to the introduction of gardening and agriculture in the elementary schools. All schools that give such instruction avail themselves of the help rendered by the agricultural experts stationed throughout the country, by the demonstration lessons given by the "agricultural train," by the experimental stations, and above all by the service of seed distribution conducted by the Department of Agriculture. All agricultural schools below those of university grade are controlled by the Department of Agriculture with the exception of elementary practical schools of agriculture connected with the higher agricultural schools.

Lower agricultural schools. — These are open to boys over 15 who have completed the first four years of the elementary school. The schools specialize according to their location in agricultural machinery (2 year course), dairy and pasture lands (3 years), farm operations (3 years), subtropical products (3 years), and fruit industries (3 years). The schools have a total area of about 1000 acres. The enrollment in 1925 was 211 in all the schools and the per capita cost was about 500 pesos.

Intermediate agricultural schools. — Boys over seventeen who have completed the elementary school are admitted to these schools which give theoretical and practical instruction on the administration of combined agricultural and live-stock establishments, emphasizing some central study determined by local conditions. Such special courses are agriculture and live stock, oenology and wine industries, rural administration, and the sugar industry. The courses last three years and the graduates are given diplomas as experts in their chosen field. These schools have an area of 3000 acres. The total enrollment was 384 students at a per capita cost of 360 pesos. Schools of this type are attached to the Universities of the Litoral and of La Plata.

Higher agricultural schools. — These are connected with the Universities of Buenos Aires, La Plata, and Litoral, and have the same admission requirements as the Universities. The faculties include two departments — that of agriculture granting the Diploma of Agronomic Engineer, and that of veterinary science giving the Diploma of Veterinary Surgeon. The enrollment and number of professors are shown in the following table :

UNIVERSITY	AGRICULTURE	VETERINARY SCIENCE	PROFESSORS
Buenos Aires . . .	170	116	57
La Plata	52	83	33
Litoral	26	32	28

MEDICAL AND SOCIAL WORK

Medical inspection of schools. — All elementary school systems have organized bodies of medical supervisors; the service of Buenos Aires is the most complete, consisting of thirty physicians (one for each of the twenty school districts, five for weak children, and five for special work). The spe-

cial work is conducted in five clinics, — ophthalmological, otorhinolaryngological, lungs, women's diseases, and dermatological; there are also an odontological consulting room and a chemical and biological laboratory.

The medical inspectors during the first three months of the school year examine the children who enter the school for the first time in order to discover the sick, weakly, feeble-minded, etc. They also grant leave of absence to teachers and members of the school personnel in cases of sickness.

Physical education. — Some time is devoted daily to calisthenics in the elementary schools, but very little has been done so far to organize interschool sports and games. Playgrounds are, however, being established by the municipal administrations through their playground departments.

On the recommendation of the National Commission for Physical Education the Minister of Public Instruction has required the secondary schools to devote two sessions of two hours each per week to physical training and games, which are also found in the courses of the normal schools.

Elementary as well as secondary school teachers of physical training are prepared in the Higher Institute of Physical Education, which is open to those who hold a teacher's diploma. The Institute provides separate courses for men and women; the length of the course is two years with an additional year for advanced work. An elementary training school is attached to the Institute. The enrollment of students was fifty men and two hundred one women.

Schools for weak children. — Provision is made in five schools in Buenos Aires for weak children. The schools are really open-air schools and are open from September to March. The 2000 children enrolled receive breakfast, dinner, and refreshment in the afternoon.

Since 1900 the municipal government has instituted an

important social work through the vacation colonies which are established in three beautiful parks under the director of playgrounds. The children receive free street-car transportation and hearty meals. The activities include games, nature study, music, etc. This benefit is extended to about 7000 children each summer.

School canteens. — The need of providing weak children with food has been justified by a survey made in 1917 which showed that eighteen per cent of the school children were undernourished. School canteens are maintained by school authorities and by some educational associations. Since 1906 many thousands of children have been receiving a glass of milk daily. The authorities expect shortly to provide for all of the 250,000 children in the schools of Buenos Aires. The cost of this service is borne by the Parent-Teacher and Child Associations.

School coöperative society. — An organization established on the principle of mutual help has been introduced and now has some 100,000 members through whose contributions about 7000 children received school materials, clothing, etc., and 5000 were given medicines, medical aid, and a daily grant of one peso.

Temperance leagues. — The National Temperance League, a branch of the W. C. T. U., has established children's leagues in several schools as well as mothers' clubs which coöperate in a campaign against alcohol.

Training of defectives. — The National Institution for Blind Children, established in 1910, gives instruction to 135 blind children, each pupil costing the state 1357 pesos. Education for the deaf and dumb has been in existence since 1857. The Ministry of Public Instruction supports two institutions, one for 142 boys and the other for 205 girls, at an annual per capita cost of 1000 pesos; the institution for boys offers a course in orthoepy for teachers, and that for

girls maintains a normal school for preparing teachers of the deaf and dumb.

About eight hundred feeble-minded children are taken care of at the Asylum for Feeble-minded at Torres, near Buenos Aires, an institution that cost several million pesos and whose grounds cover nearly six hundred acres.

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BRAZIL

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BRAZIL

INTRODUCTION

The republic of the United States of Brazil consists of twenty states, one territory, and one federal district. Except for purposes of national defense, the maintenance of order, and the imposition of certain taxes the states are autonomous. The country has an area of 3,285,318 square miles and a population, according to the census of 1920, of 30,635,615.

Education in Brazil reflects all the changes through which the country has passed. A colony of Portugal until 1822, Brazil during the whole period had an educational system modeled on that of the mother country. Higher education in Portugal was given by the Jesuits until the middle of the eighteenth century. It was not until the third quarter of that century, in 1773, that the Marquis of Pombal, after the expulsion of the order, created a system of elementary education under the state and developed secondary and higher education.

Two important factors, then, retarded the development of popular education in Brazil ; first, the existence in the nation for a long time of two populations, masters and slaves, separate and distinct ; second, the education given by the Jesuits, which, inspired by the attitude of that epoch, ignored the existence of the masses and organized, in spite of their sympathy for the natives, a system of schools for the élite with manifestly aristocratic ends. For this reason, therefore, the interests of governments have always been far

stronger in the direction of secondary and higher education than of elementary or industrial. Toward the end of the colonial period some attention was given to elementary education and a fund, known as the "literary subsidy," was established.

It was, however, John VI, who, after his arrival in Brazil with the Portuguese court in 1808, immediately devoted his attention to public education, and in the same year established elementary schools for girls. Count de Barca was intrusted with the drafting of a system of education that would bring about some unity. After independence was declared on September 7, 1822, in the Constitution of 1824 elementary education was made free and the Government undertook to establish schools. Secondary education continued to be given in the seminaries and colleges of the Jesuits, and higher education was organized in 1827 with the creation of schools of law at Recife and São Paulo, and the schools of medicine at Rio de Janeiro and Bahia in 1832. In 1837 the Collegio Pedro II was established and became the model followed by the secondary schools (*Lyceus*) established in the provinces, with the result that the importance of the seminaries began to decline.

So far as elementary education is concerned the *Acto Adicional*, or supplement to the Constitution of 1834, withdrew the powers from the central government and conferred them on the states and municipalities, whose representative organizations were required to legislate on the subject. This principle was continued when the Republic was established.

ADMINISTRATION OF EDUCATION

There is no Ministry of Public Instruction in Brazil, but only a National Department of Education within the Ministry of Justice and the Interior, which was organized in its present form under a Director-general in 1925. The De-

partment is charged with the supervision and administration of higher and secondary education, and the financing of schools in the regions settled by foreign immigrants. The latest reform of 1924 authorizes the federal government to grant aid to the states for the maintenance of rural schools under certain conditions. Thus the states receiving aid, which is given in the form of teachers' salaries, must undertake to provide the buildings and equipment of the rural schools, must not reduce the number of schools already in existence, and must devote at least ten per cent of their revenues to education. The teachers in the aided school are appointed by the Department and the course of study of the Department must be followed.

Technical and vocational education, including industrial and agricultural, are under the control of the Ministry of Agriculture, Industry, and Commerce.

The states, however, maintain any type of school or education that they wish. There is thus overlapping in the fields of secondary and vocational education and even in higher education, certain faculties being maintained by the states. In the states and municipalities the administration of elementary education is intrusted to directors-general and their technical staffs, all appointed by the state governors as a rule.

PRESCHOOL EDUCATION

Kindergartens and maternal schools are not yet widely extended in Brazil. Some states are establishing them in thickly populated working-class districts. There are thus fifteen public kindergartens and three public maternal schools, besides a number of private schools of this type in various parts of the country. The kindergartens are distributed as follows: *Public*: Amazonas, 1; Pernambuco, 3; Sergipe, 1; Bahia, 1; São Paulo, 1; Santa Catharina, 1;

Paraná, 1 ; Minas Geraes, 3 ; Federal District, 3. *Private:* Federal District, 2 ; São Paulo, 1 ; Rio Grande do Sul, 3.

There are three maternal schools, one in Estado de Rio and two in Minas Geraes.

ELEMENTARY EDUCATION

Elementary education is maintained by the states, by municipalities, and by private organizations, some of the latter in receipt of federal aid, some not. In the absence of a Ministry of Public Instruction charged with the administration of all branches of public education, it is difficult to maintain a definite character in the schools, since each state or municipality is free to impress whatever character it considers proper, without giving and without being in any way compelled to give any attention to its own local needs. The reform of 1924, already mentioned, which is regarded by most authorities on the Constitution as unconstitutional, represents only the beginning of a tendency for greater participation of the Federal government in the education of the lower classes.

Progress in education. — Many states have during the last two years taken steps for the improvement of their schools and the adaptation of education to modern needs. Measurable progress has been marked in São Paulo, Minas Geraes, Estado do Rio, Paraná, Pernambuco, Bahia, Alagoas, Rio Grande de Norte, Ceará, and Espirito Santo. The Federal District, although it has not yet obtained the legislative sanction of the local authorities, has reorganized its system along the most modern lines, and is making an effort to adapt education to the realities of modern life.

Owing to the grave financial crisis and the serious restriction of expenditures, the educational authorities find themselves in the position of being unable to create new services or even to develop those that exist ; only appeal for private

aid and the enthusiasm of the teachers have made real improvement in popular education possible.

The statistical facts showing the state of elementary education in the states are given in the table on pp. 64-66.

Teachers. — Teachers in public elementary schools are graduates of state normal schools, which are found in all the states. The length of the course in the normal schools is generally five years, as it was in the Federal District until 1922. In that year the course was reduced to four years, but in 1924 the administrative authorities asked for an increase to five years, the last two years to be devoted to specialization in technical or practical subjects.

Cost of elementary education. — There is a growing concern throughout the country for elementary education and the means of maintaining it, which are inadequate for its support, particularly as the local needs have grown considerably in the last five years. Thus the total cost for all the states has increased from 60,370,159\$000 ¹ in 1920 to 110,-937,514\$000 in 1925, an increase of nearly 100 per cent in five years. This represents a real increase, greater than the rise in the cost of living, and indicates the growth of interest everywhere in public education.

Illiteracy. — The extent of the educational problem is shown by the high percentage of illiteracy. This ranged in 1920 from 38.7 per cent in the Federal District to 88 per cent in Piahy. Of the twenty states the percentage of illiteracy in 1920 was between 60 and 69 in two states; between 70 and 79 in ten states, and over 80 in eight states. At the same time these figures represent a considerable improvement over those of 1900. The entrance of the Federal Government into the field of elementary education may mean increased intervention in a problem which is so serious for the nation as a whole as illiteracy.

¹ One milreis is equivalent to about 15 cents. One milreis is written 1\$000.

EDUCATION IN THE FEDERAL DISTRICT

The Federal District (Rio de Janeiro), the seat of the Government of the Republic, has a population of about 1,300,000 and an enrollment of some 102,000 in the elementary schools (72,000 in public and 30,000 in private schools). Taking all the figures of pupils of school age who are found in schools of some kind, there still remain nearly twenty-five per cent of the children of school age who are not in school. The problem is wholly of a financial character and unfortunately owing to the crisis in the last few years it has been impossible to find any solution. That progress has been steady is indicated by the following figures: Since 1907 the number of schools has increased from 274 to 310; the enrollment from 36,918 to 72,100; the average attendance from 21,722 or 58.8 per cent to 54,000 (round numbers) or 75 per cent. The total cost for elementary education rose from 2,167,104\$731 to 16,000,000\$000; the per capita cost for number enrolled from 150\$379 to 202\$000; the per capita cost for number in average attendance from 254\$534 to 281\$100.

It is, however, in the organization and orientation given to the instruction of the children that the interesting features of the system in the Federal District lie. In the last few years all the efforts have been directed to turn the school into a social organization and to strive for quality, even at a time when the financial conditions prevented any action in the matter of quantity. The following has been the program for elementary education:

- (1) To define the ends of education in response to present social and national needs.
- (2) To introduce into the school the atmosphere of the home and of society.
- (3) To look after health in the school.
- (4) To organize a system of aid to pupils.
- (5) To install as widely as possible the

educational film. (6) To establish school excursions. (7) To make drawing and manual work the basis of instruction. (8) To discover and introduce methods of vocational guidance. (9) To promote international friendship through the school. (10) To organize physical education.

To direct the school to its proper ends the courses of study and the methods of instruction, based on knowledge of the child and his aptitudes, take their start from the social and economic environment, while endeavoring to attract the interest of the home toward the school so as to have a decisive influence on the preparation of coming generations.

MEDICAL AND SOCIAL WELFARE

Medical inspection. — Although without any new appropriations, the service of medical inspection is directed to conferring the greatest possible benefit on the child. Medical inspection is essentially preventive in character, including in its program a campaign against endemic diseases. A strong effort is being made to eliminate fevers and vermin from the schools. From the collective point of view measures of precaution are taken with the greatest care to remove all dangers to the health of the children. Hence the number of compulsory and careful exclusions, vaccinations, and revaccinations, amounting in 1925 to nearly 20,000, and the use of individual cups introduced and made compulsory in the past year in all schools that do not have sanitary drinking arrangements, etc.

Emphasis has been placed on the keeping of pupil health records, by means of which an accurate knowledge can be obtained of the physical conditions in each school and measures taken for the protection of health. In the last year about 80,000 records were made and through them it is possible to ascertain the commonest physical defects of the

children and the preventive measures most urgently needed. These records have also been employed to draw up tables of height and weight by ages more typical of the children that have to be dealt with. The results show marked deviations from the Belgian and French anthropometric tables, and are used as a standard of comparison in the monthly graphic records of height and weight that are kept for each child.

The "health campaign," happy idea from the United States, has been introduced in a number of schools in order to develop groups of healthy children who comply daily with the health precepts and serve as examples and stimuli to other pupils.

The following table will give an idea of the activity of the medical inspection service :

Number of schools . . .	310	Pupils barred from school	402 daily
Number of visits . . .	3,787 daily	Vaccinations . . .	1,512 daily
Pupils examined . . .	19,279 daily	Revaccinations . .	12,645 daily
For :		Health records . .	6,533 daily
Skin and allied diseases	13,336 daily	Teachers examined .	1,624 daily
Sight	7,615 daily	Teachers excluded .	14 daily
Hearing	7,362 daily	Employees examined .	539 daily
Respiratory organs .	6,358 daily	Employees excluded .	3 daily
Circulatory system .	5,751 daily	Home visits . . .	123 daily
Throat and nose . .	10,130 daily	Parasitological exams.	12 daily

Physical education. — It is the duty of the medical inspector to supervise physical education and to give marks to the teachers for the attention that they give to it. He is also required to examine the children and to exempt those whose physical condition does not permit of certain exercises. The children are filled with enthusiasm for physical exercise, and in the last two years hundreds of children, accompanied by their teachers, have been observed walking miles to public gardens, to the beaches, and to playing fields to devote a

little time to natural exercises, to games, and to Swedish drill. Football has been taken up with enthusiasm and interscholastic games are arranged, leading to friendly interchange between pupils and teachers, and constituting an excellent method of civic and moral training.

But these school excursions serve not merely the ends of physical education, but also the study of natural sciences, geography, etc., for which purposes the pupils are taken, but without any compulsion, to the gardens, fields, and mountains.

Educational films. — Through the efforts of some inspectors and school principals lessons with educational films have been successfully inaugurated in some schools. Films are being specially prepared in connection with the courses of study, and the possibility of manufacturing a series of films on things Brazilian in geography, history, and natural sciences, etc., is being studied.

School philanthropy. — A great part of the measures in favor of the health of children would be useless if it were not possible to help the necessitous ones. Statistics, still incomplete, prove the extent of private effort to aid children and the remarkable rise in the number of funds and leagues of charity since 1923. There are at present forty school funds and thirty leagues of charity, of which twenty-seven were established since 1923. Figures, still incomplete, show that the disbursement from the school funds in clothing, lunches, cups of milk, and soup has amounted to 60,000\$000, and the leagues of charity have spent about 40,000\$000, without including the cost of maintaining dental clinics.

Since the middle of last year there have been established and maintained twenty milk stations in as many schools and ten stations for the distribution of soup. Nearly 800 liters of milk and 600 of soup were distributed freely every day through the coöperation of teachers. These figures do not

include lunches of other kinds supplied regularly in numerous other schools.

International friendship. — In no country is it more important to cultivate the spirit of friendliness between the brothers of the Continent and sympathy and love among nations than in Brazil, a country of immigrants in which all races are mingled together and where there is complete equality between the children of different classes and diverse origins. In conformity with this ideal twenty municipal schools have adopted the names of as many republics of America and the pupils in these schools study in particular and with much pleasure the history, traditions, and life of their patrons. Further, correspondence has been begun with the children of the countries studied.

Through the initiative of the administrative authorities a song was composed by a Brazilian teacher, Francisco Braga, to the words of a Brazilian poet, Goulart de Andrade, a *Hymn to American Fraternity* (*Hymno á Confraternização Americana*), which has been distributed in all the Brazilian states and among all the nations of America. The program of international friendship is carried further in the study of the great heroes of humanity, a common practice in the classrooms, and in the growing and enthusiastic membership of the pupils in the Junior Red Cross.

EDUCATIONAL TESTS AND MEASUREMENTS

Tests are to-day being used as an element in the promotion of pupils. Their application is, of course, not spread throughout the Federal District, and the administration in its experiments and in extending their use since 1924 is showing the caution with which it is necessary to proceed. As a measure of mental capacity and of achievement no one any more discusses the importance of tests. The psychologist and the educator are collaborating in making the school in a

very short time a laboratory of most beneficial results for the individual. One measures intellectual ability or learning ability, while the other shows what has been achieved; one points out what can be done, the other what has already been accomplished. The ability of the pupil and the value of the instruction are both measured.

Psychological tests, wherever they are employed, permit the classification of new pupils with a certainty, whose great scientific value is the more apparent when transitional groups are formed from which, after the necessary initiation, pupils can pass to the classes in which they properly belong according to their intelligence. The educational tests serve then as a method of determining the time for promotion when progress has been proved. By this means, too, it is possible to organize not only classes for the retarded but also classes for recuperation for those who are backward on account of absences, and special classes for those of superior intelligence.

Since 1924 a bureau of tests has been maintained in the office of the education authority. In 1926 this will be increased to complete the work and for the general application of educational tests, the results of which already obtained in the promotions in two districts have been encouraging.

Vocational guidance. — One of the important features of the present course of study is to arouse the attention and interest of the pupils in manual occupations. Whenever an opportunity presents itself, the teacher is required to point out the significance, possibilities, and qualifications of any occupation under consideration. Later when tests have been applied, records, both educational and medical, kept, and manual instruction combined with drawing regularly given, it will be possible to work successfully in the direction of determining vocational aptitude.

The purpose of the health record is (1) to determine the

state of health and physical and physiological condition of the pupil, taking such measures and giving such advice as may be needed, and (2) to point out what occupations are unsuitable and what are available for him. The educational record shows at once the mental aptitudes of the pupil, directing the attention of the intelligent teacher to observe whether he has to deal with natural inclination or with the result of poor methods of instruction, and then to discover the most suitable career for the pupil to follow.

SECONDARY EDUCATION

Secondary education is provided by the Federal government, by the states, and by private organizations. From the government point of view the secondary schools (*collegios, gymnasios, lyceus, atheneus*) are divided into two classes — the official and recognized schools, and schools that are examined by the government examination commissions. Fees of various kinds are generally charged and pupils are required to pass an entrance examination for admission in all the subjects of the elementary school. The Collegio Pedro II, the only Federal school in the country, serves as a model for all schools.

“Secondary education is regarded as a continuation of elementary education and aims to impart a general culture adapted to the country.” By a decree of 1925 the length of the course was fixed at six years, but pupils may take the university matriculation examinations on finishing the fifth year successfully. Those who complete the six years and pass the necessary examinations receive the baccalaureate in science and letters. There is a rigorous system of examinations at the end of each year of the course before specially constituted examination boards. There are specific regulations for the appointment of teachers, the majority of whom are selected by a competitive system.

The curriculum includes the following subjects: Portuguese and Brazilian literature, French, Latin, English, or German, history (universal and Brazilian), geography, moral and civic instruction, mathematics (arithmetic, algebra, geometry, and trigonometry), natural history, physics, chemistry, cosmography, philosophy, sociology, drawing, and gymnastics. Spanish and Italian are optional.

In 1924 there were 25 official and recognized schools with an enrollment of 4940 students (4374 boys and 566 girls). Besides these there were 31 secondary schools examined by official examining boards of the Government.

UNIVERSITY EDUCATION

Higher education, wholly of a professional character, was given in a number of independent faculties until 1920, when the University of Rio de Janeiro was created by the amalgamation of a number of existing institutions, viz., the faculty of law, the faculty of medicine (with pharmacy and dentistry), and the Polytechnic Institute (now the faculty of engineering). At present there are faculties of law at São Paulo, Recife, Estado de Minas Geraes, Bahia, Pará, Ceará, Nictheroy, Porto Alegre, Maranhão, and in the University of Rio de Janeiro. The duration of the law course is five years. The total enrollment in 1924 was 1562.

The faculties of medicine are found in Rio de Janeiro, Bahia, Porto Alegre, Bello Horizonte, Paraná, and Pará. The number of students in the course of six years was 3257 in 1924.

In the same year 1124 students were enrolled in the six schools of engineering at Rio de Janeiro, Bahia, Bello Horizonte, Pernambuco, Paraná, and São Paulo. Finally, 712 students were studying pharmacy in twelve institutions (schools of pharmacy or of pharmacy and dentistry, or faculties of medicine) and 372 were studying dentistry in eight

STATE	EDUCATION BUDGET	INSPECTORS	KINDER- GARTENS	ELEMENTARY EDUCATION					SECONDARY EDUCATION			VOCATIONAL EDUCATION		
				Schools	Pupils	Length of Course	Teach- ers	Salaries	Schools	Pupils	Salaries	Schools	Pupils	Teachers
Amazonas	1,360,200\$000	10	1	201	7,518	6 years	201	2,400\$— 6,000\$	2 (1 Gymnasio) (1 Normal)	224	7,200\$	—	—	—
Pará	1,120,024\$582	10	—	350	19,267	4 years	350	4,800\$	7 (5 private)	1,115 (686 in private)	6,000\$	—	—	—
Maranhão	800,000\$000	2	—	203	8,410	4 years	203	2,600\$	2	300	4,800\$	—	—	—
Piahy	260,950\$000	—	—	120	9,010	4 years	120	2,000\$	2 (1 Gymnasio) (1 Normal)	241	3,600\$	—	—	—
Ceará	1,743,978\$300	5	—	586	21,164	4 years (3 in remote districts)	586	1,800\$— 2,280\$	2 (1 Gymnasio) (1 Normal)	253	4,800\$	—	—	—
Rio Grande do Norte	867,722\$945	3	—	454	19,563	4 years	454	2,400\$— 4,200\$	3 (1 Gymnasio) (2 Normal)	320	4,800\$	3	—	—
Parahyba	1,508,995\$402	2	—	323	14,974	4 years	437	1,248\$— 3,000\$	5	1,037	4,320\$	—	—	—
Pernambuco . . .	2,753,243\$940	3	3	445 state 555 munic. 161 private	16,784 17,308 3,674	4 years (3 in remote districts)	445	2,592\$— 4,320\$	7 (2 official) (5 recognized)	609	8,640\$— 10,800\$	—	—	—
Alagoas	1,263,480\$000	2	—	329	13,339	4 years (3 in aided schools)	392	2,300\$	2	211	4,800\$	—	—	—
Sergipe	1,286,889\$315	5	1	280	10,308	6 years	315	1,776\$— 3,528\$	3	245	5,202\$— 6,210\$	1	121	10

Bahia . . . state munic.	5,378,981\$418 3,184,191\$356 (1926)	3	1	642 state 586 munic.	—	4 years	690 state 749 munic.	3,200\$— 4,404\$	5 Normal	500	6,000\$	12	—	—
Espirito Santo . .	2,500,000\$000	5	—	458 (74 munic. and private)	25,213	6 years full course and second grade) (3 third grade)	423	3,360\$— 5,400\$	6 4 private	325 in public only	7,800\$	—	—	—
Rio de Janeiro . .	3,943,926\$700	9	—	665	43,360	5 years (3 second grade) (2 first grade)	1,106	1,800\$— 4,200\$	(1 Gynnasio) (1 Normal)	202 in Gynnasio	6,000\$	—	—	—
São Paulo . . .	51,000,000\$000	61	1	1,882	266,798 (30,000 in munic. 60,000 in private)	4 years (3 in remote districts)	6,085	4,350\$— 6,737\$500	13 (10 Normal) (3 Gymna- sios)	2,475	7,200\$	5	1912	—
Paraná	2,200,000\$000	3	1	850	46,220	4 years	850	4,800\$	3	400	6,000\$	—	—	—
Santa Catharina .	2,030,000\$000 (1926)	3	1	986 631 state	52,109	4 years (3 in remote districts)	741 in state schools	1,680\$— 5,880\$	3 (2 Normal) (1 Gynnasio)	270 in Gynnasio 107 in Normal	4,200\$— 6,000\$	2	—	—
Rio Grande do Sul	6,159,533\$000	79	—	3,454 730 private	180,383 (46,908 in private)	5 years	4,127 940 in private	3,192\$— 6,140\$	19 private	4,170	—	7 pri- vate	10,112	—
Minas Geraes . .	12,942,192\$000	35	3	2,345	260,000	4 years in centres (3 in remote districts) (2 rural)	5,000	1,584\$— 2,376\$ (incom- plete)	47 (2 Gymna- sios) (2 state Normal) (43 recog- nized Normal)	6,000	2,640\$— 6,600\$	3	—	—

STATE	EDUCATION BUDGET	INSPECTORS	KINDER- GARTENS	ELEMENTARY EDUCATION					SECONDARY EDUCATION			VOCATIONAL EDUCATION		
				Schools	Pupils	Length of Course	Teach- ers	Salaries	Schools	Pupils	Salaries	Schools	Pupils	Teachers
Matto Grosso . .	794,540\$000 (1926)	—	—	160	5,360	4 years	221	2,340\$— 3,120\$	5	265 (incomplete)	3,600\$	—	—	—
Goyaz	200,000\$000	—	—	200	4,000	—	120	2,400\$	2	180	3,600\$	—	—	—
Territorio do Acre	200,000\$000	—	—	115	3,220	—	115	2,400\$	2	100	—	—	—	—
Districto Federal	15,951,835\$000	23	3	380 public 700 private	72,000 public 30,000 private	7 years	2,301	3,720\$— 9,000\$	3 (1 Normal) (1 Gymnasio) (1 Dramatic school)	2,500	14,400\$ Gymn. 9,600\$— 12,000\$ Normal 6,000\$ Dramatic school	11	300	—
Federally aided state schools in immigrant settle- ments (Germans, Italians, Poles)	800,000\$000	3	—	474	16,301	4 years	474	2,400\$	—	—	—	—	—	—

institutions available for the subject. The total number of students in 1924 was 7046 (6855 men and 191 women).

STATISTICS

The tables on pages 64–66 present a summary of the main statistical facts on education in Brazil.

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CHILE

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CHILE

INTRODUCTION

The Republic of Chile covers an area of 289,828 square miles and is divided into 23 provinces and the Territory of Magellanes. The estimated population at the end of 1924 was 3,754,723. The Constitution provided that "education is one of the subjects of primary importance for the state" (Article 10, par. 7). In accordance with a provision so clear and definite the development of public education absorbs a large part of the national revenues, and increasing sums are devoted to it each year.

In 1923 the budget of the Ministry of Public Instruction amounted to \$66,445,117; in 1925 it rose to \$85,529,645.¹ The latter sum was actually increased before the end of the year because a higher scale of salaries for all teachers and administrative officials in the educational service came into force in October. The conception of the real needs of the nation, social, political, and economic, and a fuller knowledge of educational activities in Europe and the United States are the forces which are strongly influencing the Government, public opinion, and the teaching profession to furnish conditions that will make for greater efficiency and for the spiritual improvement of the schools and the University. Although it is felt that as much progress has been made as circumstances permitted, a strong patriotic feeling is keep-

¹ It is difficult to convert this currency into foreign terms because of the fluctuation of exchange. The United States dollar is equivalent to \$8.16 in Chilean money.

ing alive the desire to secure greater educational progress, which will make possible the more complete utilization of the powers of all individuals in the country, insure the predominance of social justice, and promote the growth of economic prosperity.

A number of important factors are contributing to the maintenance of this spirit of educational renaissance. Among these are the following: The National Education Association, the National Society of Professors, the General Association of Chilean Professors, and the Society of Elementary School Teachers; the diffusion of the works of educators like Dewey, Thorndike, Kerschensteiner, Decroly, Montessori, and others; the study of Chilean professors in foreign countries; and the publication of the *Revista de Asociación de Educación Nacional* (*Review of the National Education Association*), planned to disseminate the most progressive educational reforms both in and outside of Chile. These factors are supplemented by committees appointed by the Government to propose reforms for educational legislation. Finally, the visits of European and American professors have helped to spread a knowledge of modern theories and practices in the educational systems that they represent.

ADMINISTRATION OF EDUCATION

Central authority. — Public education in Chile is under the direction of two ministries, that of Public Instruction and that of Industries and Agriculture. The Ministry of Public Instruction has charge of all branches of general education, including higher, secondary, commercial, elementary, and the training of teachers. The Ministry of Industries and Agriculture is responsible for industrial education, represented by the schools of arts and crafts, mining, and certain vocational schools for women, as well as of agricultural edu-

cation given in the *Instituto Agronómico* and the practical schools of agriculture.

Within the Ministry of Public Instruction there is a further subdivision. Higher and secondary education are administered by one council, elementary and the training of teachers by another, and commercial education by a third, without any connection between the three which function with complete independence. To obviate the disadvantages of this system it has been proposed to carry out the requirement of the Constitution which provides for a single board of public education to serve as a coördinating and harmonizing agency between all branches by including in the board the directors of each. It is hoped that Congress will this year consider a plan for an organic system of education, articulated and correlated in all its branches, which, without interfering with the independence that each should enjoy, will permeate all with a unity of purpose.

The immediate supervision of each branch of education is thus intrusted to a council and in turn to a director. Elementary education and the training of teachers are administered by the *Consejo y Dirección de Educación Primaria y Normal* (Council and Director of Elementary Education and the Training of Teachers).

Agriculture and industrial education have the same administrative arrangements. But in general every decision of importance must be submitted by the councils to the Ministry concerned so that their executive functions are somewhat restricted.

Local authorities. — Local authorities have little right of interference in the management of public education. It is limited in two ways: First, the authorities representing the central government, the mayors and governors, have the right, more theoretical than practical, of supervising educational institutions within the spheres of their jurisdiction.

Second, the municipalities are required to provide out of their own resources one elementary school for boys and one for girls for each thousand inhabitants, provided that there are not already in existence state or private schools in sufficient numbers.

The organization of education is thus characterized by strong centralization. From one end of the country to the other all questions concerning education are submitted to the Capital, there to be settled by the central authorities, usually by the government itself. It is in Santiago that the final decision is made, whatever the question is — the establishment of new courses or schools, the appointment, dismissal, or leave of teachers, the renting or building of schools, appropriation of funds, or the purchase of equipment. The local authorities have no right whatever to interfere in the efficient development of public education.

Recently there have been signs of a tendency in favor of decentralization, at least in elementary education. It is proposed that each province or a group of provinces should enjoy relative autonomy for the solution of the more pressing problems in the elementary schools. For this purpose councils of elementary education should be established in each province or area with well-defined powers but subject to the authority of the central council in Santiago. It is expected that the following advantages would flow from decentralization: (1) More immediate attention to problems affecting the success of elementary education. (2) Solutions based on more direct knowledge of local conditions. (3) Closer relations between the authorities and the public which would be stimulated to take a greater interest in the work of the school and contribute more readily to its greater success. (4) More liberty of action for authorities in the exercise of their functions in defining policies and in stimulating the professional enthusiasm of the teachers.

Inspection and supervision. — Inspection of schools is conducted by officials known as visitors (*Visitadores*), whose duty it is to supervise and help the teachers and administrative officers in the schools under their charge, and to submit reports of their activities to the central office. In elementary education there were in 1924 forty-three inspectors with general supervision over the schools of specific districts, and ten inspectors of special subjects, such as manual work, domestic economy, drawing, music, and gymnastics, throughout the Republic.

There were in addition also the following inspectors: two for normal schools; two for secondary schools (*liceos*) for boys and two for secondary schools for girls; one for commercial institutes; two for state vocational schools; one for private vocational schools; one for industrial schools; and one for agricultural schools.

Inspectors are appointed from a list of teachers and principals of schools drawn up and kept in the office of the director-general of elementary education. Candidates must meet certain conditions and pass a qualifying examination. In order to improve the qualifications of candidates for inspectorships as well as for administrative positions it has been proposed to establish courses in educational administration for them. At the same time it is suggested that the administrative duties of inspectors or visitors be reduced, in order to enable them to exercise their educational influence to the full.

PRESCHOOL AND KINDERGARTEN EDUCATION

This type of education is not well developed in Chile. There are a few kindergartens attached to elementary schools or maintained privately, but they do not play a significant part in the system. The kindergarten, modernized under the influences both of Montessori and of educators in the

United States, has not yet been established to any extent, although it is needed to serve as an intermediary between the life of the home and the school, which are so different in many ways.

ELEMENTARY EDUCATION

Compulsory education. — A compulsory education law was first passed in 1920, although it had already been proposed in 1900. The law went into effect in March, 1921. Owing to the lack of buildings, equipment, supplies, and teachers compulsion extends only to four years of elementary education out of the full six years that are provided. As soon as circumstances permit, it is hoped that it will be possible to require compulsory attendance for the whole of the elementary course, particularly as the new Constitution which came into force in September, 1925, provides in Article 10 that "elementary education is compulsory" without any reservations.

As the law stands at present children under thirteen must complete four years of the elementary school, whether state, municipal, or private, or in their own homes. In the last case the children must pass an annual examination before a special board covering the work of the year. The state has the right of inquiring through its inspectors whether the regulations on compulsory attendance are adequately complied with in private schools. The only excuses for total, partial, or temporary exemption from school attendance are : (1) the lack of a school or of a vacancy in the school, and (2) some physical or moral impediment. Poverty is not accepted as an excuse for nonattendance. Children under sixteen are not permitted to work in factories or workshops unless they have complied with the requirements of the compulsory education law.

The law has created an education committee (*Junta de*

Educación) in each commune and municipality to carry out its provisions. The functions of the committee are as follows: to take a census of the school population each year and to register those subject to school attendance; to see if minors engaged in factories or workshops have complied with the law; to look into the sanitary conditions of the schools; to encourage the support of elementary education; to request the magistrates to impose the proper penalties for infractions of the law; to report to the Council for Elementary Education.

The penalties for failure to comply with the compulsory education law range from oral warning to a fine of from one to thirty pesos, or imprisonment from one to ten days. For repetitions the amount of the fine or length of imprisonment may be doubled. While there has been a marked increase in attendance since the law came into force in 1921, complete success of compulsory attendance regulations is still remote.

Elementary schools. — Elementary education is free and textbooks and supplies are provided free to necessitous children. The schools are divided into three groups: (1) those of the first class with three grades, each grade giving two years of work; (2) those of the second class with two grades; and (3) those of the third class with less than two grades.

Curriculum. — The course of studies includes reading, writing, language, Christian religion and morals, hygiene, arithmetic, geometry, geography and history (both national and general), elements of natural sciences and physics, civics, gymnastics, singing, drawing, and manual work. Increasing attention is being given to drawing, manual work, domestic economy, and agriculture, as a link between the school and the home, and the school and vocations. In 1923 the 668 workshops in wood, cardboard, basketry, bookbinding, and modeling were attended by 16,762 pupils, an increase over 1922 of 253 shops and 6097 pupils. For girls there were 860 shops for needlework, an increase of 55 over those

of 1922. There were also in the same schools 121 shops for weaving and 130 rooms for domestic economy attended by 54,238 pupils or 23,674 more than in 1922.

In 1926 the new courses of study, prepared under the director-general of elementary education, will come into force and will supersede the courses that have been in existence since 1910. The committee on the revision of the courses aimed to remove the defects that have characterized the old system, such as remoteness from reality, consideration of the past without any relation to the present, absence of local or national emphasis, overexaggeration of the materials of study to the neglect of the nature of the child and disregard of his interests. An attempt has also been made to remove the consequent defects — insistence on useless information and neglect of useful knowledge, superficial encyclopedism, knowledge beyond the capacities of the children, and absence of practical activities in relation to each subject of study. The new courses of study show the evidence, and at times acknowledge the influence, of educational theories both in the United States and in the newer European schools. The development of the powers and capacities of the child and his efficient socialization have been regarded as of greater importance than the mere transmission of knowledge. The content of the courses has been reduced and its relation to the present, to the activities of daily life, whether individual, domestic, communal, or national, have been emphasized in such a way that the value of education becomes evident as linking together the facts, principles, and processes studied with real situations in life, which is thereby better understood and improved.

In order to avoid the abuse of memorization there are mentioned in each case the manual or intellectual exercises that are to accompany the study of any topic. An attempt is made to reconcile the individual study, in which the indi-

vidual progresses in accordance with his own ability, and socialized school work through which the pupils learn as the supreme aim of education "to live and work with others and to live and work for others." Accordingly the new courses aim to prepare for health, home life, social, civic, and economic relations, the employment of leisure time, creative activity, and appreciation of beauty.

It cannot be expected that the course will be correctly applied or judiciously interpreted. It will be necessary to organize courses for teachers in which the general principles and the detailed recommendations will be discussed. This task is all the more essential because the courses of study must be adjusted to the changing needs of each district.

Private elementary schools. — These schools are mainly religious in character. They are supervised by the state with special reference to school attendance, hygiene, and morals. The schools are divided into two classes: (1) schools aided by the state, which number 357, have an enrollment of 52,657 pupils (33,331 boys and 19,326 girls), employ 1206 teachers, and receive \$870,550 from the state; and (2) unaided schools, which number 104, have an enrollment of 9632 pupils (6822 boys and 2810 girls), and employ 241 teachers.

SECONDARY EDUCATION

Secondary education is administered by the Council for Public Instruction which also has charge of higher education. There are 94 secondary schools or *liceos* (43 for boys and 51 for girls), which offer a course of six years. The courses of study are the same throughout the country, the only difference being in the manual work for boys and girls. The education given is wholly humanistic, so that it is feared that the secondary schools foster an inclination to enter the liberal or learned professions. The hope has been expressed that some of the schools would be transformed into technical

schools, especially in the smaller towns where the schools are unable to give the full six-year course. There are many schools, especially for girls, that only give three, four, or five years of the course. It has also been suggested that some schools offer courses of a practical nature side by side with the humanistic courses, somewhat after the model of the cosmopolitan high schools in the United States. None of these ideas has yet assumed practical shape except that a commercial course has been begun in one school for girls.

Secondary education is free, the pupils coming either from the elementary schools or from the preparatory courses attached to secondary schools and giving elementary instruction. These preparatory courses have been attacked as detrimental to the elementary schools and tending to develop class distinctions. In their favor it is claimed that they make up for a shortage of elementary schools. The admission requirements to the secondary school include only the completion of the first four years of the elementary course of study.

The curriculum and time-schedules of the secondary schools are given in the accompanying table:

SUBJECT	YEARS	1	2	3	4	5	6
Spanish	4	4	4	3	3	3	
Philosophy	—	—	—	—	2	2	
French	4	3	3	3	3	3	
English or German (Italian) .	—	4	4	3	3	3	
History and geography . . .	3	3	3	4	3	3	
Mathematics	4	4	4	4	3	3	
Natural sciences	2	2	2	2	2	2	
Physics	—	—	—	2	2	2	
Chemistry	—	—	—	2	2	2	
Civics	—	—	—	—	2	2	
Religion	2	2	2	1	1	1	
Drawing and writing	5	3	3	2	2	2	
Manual work	2	2	2	2	2	2	
Singing and gymnastics . . .	3	3	3	3	3	3	
Total	29	30	30	31	33	33 hours per week	

An examination is held at the end of each year of the course. Pupils who complete satisfactorily the examination of the sixth year may take the examination for the baccalaureate (*bachillerato*) which is conducted in Santiago by specially appointed commissions. Those who pass this examination receive the degree of Bachelor in Humanities, which entitles them to admission to the universities.

VOCATIONAL EDUCATION

There has developed in the country a clear recognition of its economic independence which is bound up with the increasing participation of its citizens in commercial, industrial, and agricultural activities. The Government on its side has devoted considerable attention to diverting the energies of a large part of the youth of the country to the development and improvement of the economic resources. Hitherto there have existed social prejudices in favor of liberal careers, due in part to the absence of educational opportunities to direct and guide those inclined to enter the vocations. The influx of students to schools and courses of a practical and vocational character is proof of a new tendency in the public to appreciate the manual activities, as well as of a movement to provide in the educational system the kind of preparation that will develop the unlimited resources of the country, and increase industrial and agricultural production, public wealth, and general well-being.

Lower vocational schools. — The vocational schools now found in Chile originated in 1908 in the establishment of four central schools for manual work, in which pupils of the fifth and sixth years in the elementary schools continued the handwork begun in the lower classes. Provision was made for work in wood, metal, upholstery, tailoring, domestic economy, and household activities. The plan remained virtually unchanged until 1920, when the government reorgan-

ized the schools according to modern principles and changed them into definite vocational schools with the following objectives: to guide the pupil in the selection of a manual occupation suited to his natural aptitudes, to train in the occupation selected, to establish a natural coördination between general elementary education and vocational training. Two grades of instruction are given — prevocational for those who are still in the elementary schools, and vocational for those who have completed the elementary school or the prevocational course.

The vocational schools are under the administration of the director-general of elementary education and are inspected by a special inspector. Each school has its own principal and the appropriate number of teachers. To be admitted to the prevocational course pupils must present a certificate from the principal of the elementary school that they are attending and deposit not less than one peso in the savings bank (*Caja de ahorros*); to be admitted to the day or night vocational courses candidates must be able to read, write, and perform the first four fundamental operations in arithmetic, must present certificates of honesty and good conduct, and must make a deposit of ten pesos in the savings bank.

There are at present ten vocational schools, three for men, two for women, and five mixed. The enrollment in the past year was 2992 (1206 men and 1786 women). The courses are divided into theoretical subjects including industrial and decorative drawing, mathematics, physics, chemistry, and technology; and practical courses in wood, metal, electricity, textiles, pottery, graphic arts, household arts, and various other occupations.

Higher vocational schools: *For Men* — The purpose of these schools is to prepare skilled workmen, foremen, and heads of shops or factories in the mineral and manufacturing industries. They include the following institutions:

School of Arts and Crafts in Santiago (*Escuela de Artes y Oficios*)

School for the Nitrate Industry at Antofagasta (*Escuela de Salitre*)

Schools of Mines at Copiapó and Serena (*Escuelas de Minas*)

Industrial Schools at Chillán and Temuco (*Escuelas Industriales*)

These schools are under the Ministry of Industries and Agriculture and are administered by a special Council for Vocational Education for Men and the Director-General, created in 1925 to replace a number of separate councils that existed previously. The functions of the Council are to recommend general regulations for the administration of the schools, the establishment of courses or schools, and the classification of teachers for salary purposes. It prepares the budget and an annual report, and has general supervision over administrative questions affecting the schools. The director-general is the executive officer both of the Government and of the Council.

Since the courses of study are at present undergoing revision, it will suffice to give a brief summary of the courses of the School of Arts and Crafts in Santiago, which are least likely to undergo considerable change. This school, established in 1849, aims to give the necessary scientific, technical, and manual training for operatives in workshops and factories. Both day and night courses are offered without any charges for tuition. Candidates for admission, which is competitive, must be between fourteen and seventeen years of age, must be in good health and of good conduct, and must have completed the full six-year course of an elementary school or the first two years of a secondary school in mathematics, Spanish, history, and geography. In addition to free tuition the state furnishes assistance for 300 boarders

and 250 half-boarders. In 1925 there were enrolled 340 boarders and 300 half-boarders.

The duration of the day courses is five years, the first three of which are general and common for all and the last two years specialized for mechanics, electricians, and chemists.

The following curriculum is offered :

COMMON SUBJECTS	YEARS	1	2	3	
Arithmetic	5	—	—	—	
Geometry	3	3	—	—	
Algebra	—	4	2	—	
Trigonometry	—	—	2	—	
Physics, elementary	—	4	—	—	
Mechanics	—	—	3	—	
Electrotechnics	—	—	3	—	
Chemistry, elementary	—	3	—	—	
Chemistry, applied	—	—	2	—	
Descriptive geometry	—	—	2	—	
Freehand and geometrical drawing	3	3	—	—	
Machine drawing	—	—	2	—	
Technology	—	—	3	—	
Spanish	3	2	2	—	
English	4	3	2	—	
Civics	—	—	1	—	
History and geography	3	—	—	—	
Religion and morals	1	1	—	—	
Gymnastics	2	1	1	—	
Total	24	24	25	hours per week	

These studies are supplemented by seventeen hours a week of practical work in the shops of the school. At the end of the first three years students who have completed the course satisfactorily are given the title of "operative" in one of the following activities: ironsmith, coppersmith, smelter, tinsmith, carpenter, molder, mechanic, or electrician. To obtain the title of "technician" the course in special subjects must be completed, a final model must be

made in the workshop, and a project worked out on a subject set by the professor in charge. This title is not granted until after the completion of six months of practical work in an industrial establishment.

In addition to these courses the schools also offer courses at night and on Sundays. These are intended in general for the improvement of workers already engaged in some

SPECIAL SUBJECTS	YEARS	MECHANICS		ELECTRICIANS		CHEMISTS	
		4	5	4	5	4	5
Algebra and geometry		2	—	2	—	—	—
Machine drawing		3	—	3	—	—	—
Mechanics		3	—	3	—	—	—
Resistance of materials		3	—	3	—	—	—
Special projects		—	2	—	2	—	—
Machines		6	8	—	3	—	3
Automobiles and aviation		—	3	—	—	—	—
Electrotechnics		2	—	8	8	2	—
Accounting		—	2	—	2	—	2
Industrial technology		2	4	2	4	—	—
Administration and management		—	2	—	2	—	2
English		2	2	2	2	2	2
Civics		1	1	1	1	1	1
Gymnastics		1	1	1	1	1	1
Chemistry, general		—	—	—	—	6	—
Chemistry, analytical		—	—	—	—	6	8
Chemistry, industrial		—	—	—	—	6	6
Total		25	25	25	25	24	25

occupation. The night courses, given between 7.30 and 9.30 P.M., include six hours of practical shopwork and trade technology, two hours of arithmetic, and one hour each for geometry, industrial drawing, and Spanish. The courses are two years in length and offer opportunities for training in carpentry, modeling, ironwork, mechanics, and electricity. The Sunday morning courses are somewhat similar but necessarily shorter.

Higher vocational schools: *For women* — The Vocational School for Girls, opened in 1888 as the School of Arts and Crafts for Women, has been of such service to the country that the number of schools of the same type has increased to twenty-seven. These schools are under the Ministry of Industries and Agriculture, and administered by the Council for Vocational Education (*Consejo de Enseñanza Profesional*). Four types of courses are offered: (1) commercial, three years in length; (2) women's work; (3) household arts; and (4) domestic economy, each with a two-year course. To be admitted to the first of these courses candidates must have completed the six years of the elementary course; to be admitted to the other three only the completion of the first four years is required.

Since 1906 there has been in existence a normal course to prepare teachers for this type of school. Candidates are admitted to this course on completing the full elementary school course and graduation from one of the vocational courses for women. The course of training lasts four years. The enrollment in 1925 was 54.

Commercial education. — Commercial education began in 1898 with the establishment of the *Instituto Técnico Comercial*, now called the *Instituto Superior de Comercio*. Since then similar schools have been established at Valparaíso, Antofagasta, Concepción, Iquique, Arica, Vallenar, Talcahuano, and San Carlos. Their function is to prepare merchants and experts in commerce and industry as well as in the different branches of the public services such as the taxation and customs offices, public accountants, and credit institutions in general.

The general supervision of commercial education is under the Ministry of Public Instruction, and the administration is directly in the hands of a Council for Commercial Education (*Consejo de Enseñanza Comercial*) consisting of representatives of such institutions as the Chamber of Commerce,

the Commercial Union, the Society for the Promotion of Industry, banks, and some university faculties. Until last year each institution had its own course of study to meet local conditions, but recently a uniform course has been adopted with opportunities for local adjustment. The students from these schools readily find positions; many of them have attained responsible posts in economic life and important appointments in commerce, industry, the public service, and in the field of commercial education.

The Council is bending its efforts to the improvement and better development of this type of education throughout the country by the establishment of specialized courses with better training so that in a short time this form of education will attain a higher or university level. The prestige of these institutions is great not only within but also outside of the country, as is indicated by the number of foreign students in attendance.

In addition to the subjects of general culture the courses include accountancy in all its branches, commercial mathematics, economic geography, commercial practice, commercial products, political economy, and stenography. The *Instituto Superior de Comercio* in Santiago offers a course of university rank for the training of teachers of commercial subjects, who are not prepared in the *Instituto Pedagógico*. Courses are also given for commercial experts, consuls, and in such subjects as customs, laws, statistics, public finance, commercial law, international law, etc.

Agricultural education. — The governing authorities have given particular attention to the development of agriculture as an assured source of wealth which will soon bring speedy returns. For this among other reasons there has been established a Ministry of Agriculture, Lands, and Colonization. Agricultural education can count on all the support that its importance demands.

Commissions were sent to the United States, Belgium, Italy, France, England, Switzerland, and elsewhere to study the organization of higher agricultural education in all its phases. On their return these commissions drew up complete plans for reforms adapted particularly to the conditions of the country. The state is actively interested in arousing an interest in agriculture and is not sparing any expense to insure the desired success. The following types of agricultural education are given:

Agricultural Institute. — This institution is of university rank and trains agricultural engineers. The bachelor's degree is required for admission to the four years' course leading to the degree of Agricultural Engineer (*Ingeniero Agrónomo*). The training prepares for giving instruction in agriculture, conducting experiments, and managing agricultural developments on estates and in factories. The Institute is located on the agricultural experimental farm (*Quinta Normal de Agricultura*) in Santiago which covers an area of one hundred fifty hectares.

School of Veterinary Medicine (Escuela de Medicina Veterinaria). — Here a course of four years is given along the most advanced principles of this field of science. Candidates for admission must have completed the second year of the Agricultural Institute.

Intermediate and short courses in agriculture. — These are given at the Agricultural Institute; the intermediate course lasts two years, the short course one year. The following subjects are dealt with: general and special farming, horticulture, fruit trees, general agriculture, fertilizers and manures, agricultural machinery, technology, zoötechnics, industrial animals, and gardening. The courses are intended for farmers or for their sons who wish in a short time to be prepared to take personal charge of their farms.

Agricultural schools. — For the preparation of the practical workers on the farm the country has a number of practical schools of agriculture (*Escuelas agrícolas prácticas de agricultura*). The only entrance requirements are reading and writing and the age limits are between fifteen and twenty. The schools are boarding institutions and offer a three-year course, with an additional year for those who wish to specialize in some particular branch. At the end of the third year a diploma of competency is granted, while those who specialize for the additional year are granted a certificate indicating the field in which they have specialized.

There are in all six schools, each giving courses adapted to the region in which they are located. They are under the supervision of the inspector of agricultural education and the director-general for the agricultural services. The faculties of the various sections are made up of specialists with the degree of agricultural engineer. Education and promotion of agriculture are under the Ministry of Agriculture, assisted by the Council for Agriculture and Veterinary Medicine (*Consejo de Agronomía y Veterinaria*) and the director-general for the agricultural services.

The majority of the activities concerned with agricultural education and promotion are concentrated in the *Quinta Normal de Agricultura* in Santiago, and include the following: the general direction of agricultural services, propaganda and publicity, economic studies, fruiticulture, pathology and animal hygiene, alcoholic products, cœnological station, meteorological institute, and agronomical station.

Agricultural education in the elementary schools. — Owing to the lack of funds, the teaching of agriculture in the elementary schools is limited and provided mainly in rural schools and in urban schools with sufficient land to make the instruction practical. In some cities there are agricultural

centers under specialist teachers to which pupils are sent from different elementary schools.

Courses for elementary school teachers. — These are short courses of one or two years in length to prepare teachers to give instruction in agriculture in the elementary schools. Rural school teachers are given the preference in admission. Courses are given by specialists on the following subjects: horticulture and gardening, aviculture and apiculture, fruit trees, general agriculture, fertilizers and manures.

A few normal schools have instructors of agriculture who are by preference agricultural engineers with a normal-school training. One hour a week is given to the course which includes the same subjects that have been mentioned in the preceding paragraph. The work is done practically on the land.

TEACHERS

Training of elementary teachers. — The first normal school in Chile (and in South America) was established in 1842, and had as its first principal the distinguished Argentinian, Domingo Faustino Sarmiento. Ever since that time the government has always given much attention to the preparation of teachers. There are now fifteen normal schools throughout the country which are becoming centers for social as well as pedagogical training. The length of the course is five years, divided into two cycles, one for general education, lasting three years, and the other of two years for both general and professional training.

The normal schools are residential, the students receiving from the state free board and lodging as well as free tuition and books. There are only two schools for girls that receive half-boarders, the pupils remaining in the school from 8 A.M. to 5 P.M. Candidates for admission must have completed the six years of the elementary school and must pass a com-

petitive examination, since the numbers are limited and no school is permitted to admit more students than are assigned to it in the budget. The number of students in each school ranges from 124 to 220. The schools are not coeducational; there are six schools for men and nine for women. There is, besides, a private normal school for women, the Santa Teresa Normal School, which receives aid from the state.

The same course of study is found in all the normal schools. The following table gives the total number of hours devoted to each subject during the whole course; the number of weekly hours is thirty-one.

SUBJECT	HOURS	SUBJECT	HOURS
Education	24	Biology and hygiene	6
Religion and morals	6	Mathematics	14
French or English	11	Caligraphy	2
Spanish	18	Drawing	9
History and geography	12	Manual work	10
Civics and economics	5	Music and choral singing . . .	8
Natural sciences	13	Physical education	15

To these must be added two hours of horticulture for men and two hours of domestic economy for women. No special provision exists for training rural school teachers as such. The following suggestions have recently been made for the improvement of the normal schools: (1) The addition of a sixth year. (2) The complete professionalization of the last two years. (3) The provision of a liberal education for the normal-school students equivalent to that given in the secondary schools. (4) The requirement of special preparation for the normal-school professors. (5) The establishment under the director-general of elementary education of a special division for the training of teachers.

It has also been proposed to reduce the course to purely professional subjects and to abolish the residential feature.

There has been discussed the suggestion of introducing special preparation, as, for example, for teachers of the primary grades, for teachers of the upper grades, and for teachers of special subjects like drawing, singing, physical education, and manual work. The need of establishing special courses for rural school teachers has been particularly emphasized.

Some, if not all, of these proposals are likely to be put into practice in the near future. The more the idea of democracy expands, the greater will be the attention given to popular education and to the improvement of elementary education. Since the fundamental factor for its success is the teacher, the real problem to-day is not the "new school" but the "new normal school." Much will depend on the future direction of the movement begun in the realm of politics in 1924.

Each normal school has a training school (*escuela de aplicación*) attached to it for the purpose of observation, participation, and practice on the part of the students. There is no uniform practice in the methods of administering these schools; in some cases they are under the charge of the professors of education; in others it is claimed that all the professors of academic subjects should coöperate, introducing the students to the methods of each subject and directing their practice. The training schools are regarded as schools of superior quality; special qualifications are required both of the principals and teachers, who receive a somewhat higher remuneration than teachers in the regular schools. In addition to work in the training schools, the normal-school students are required to practice in other elementary schools in their locality.

Salaries. — The salaries of elementary school teachers vary with the type of preparation that they have had and with the class of school in which they are teaching. Teachers of the second class receive \$4800 a year; those of the

first class are paid \$6000 a year ; principals of schools of the first class receive \$3000 a year in addition to their salaries as teachers ; principals of schools of the second class receive \$1800 additional pay. (See page 77 for classes of elementary schools.)

The salaries of elementary school inspectors range from \$10,800 to \$13,800 a year. In the normal schools the salaries range from \$600 a year for each hour taught per week to \$12,500 paid to the directors and \$16,500 for the normal-school inspector. All salaries rise by an increase of ten per cent for each three years of service, so that the initial salary is doubled in thirty years.

In the administrative services the salary of the director-general is \$36,000 a year ; the heads of divisions receive \$22,500, and the secretaries of the Council for Elementary Education and of the Director-General's office are each paid \$25,200.

Pensions. — By a law of June 14, 1925, the National Fund for Public Employees, including teachers, was established. Employees are required to contribute from five to ten per cent of their monthly salaries according to the decision of the Directive Council of the fund. The plan provides retiring allowances, a death benefit, and insurance in favor of the families of employees who die in service or after retirement.

A pension equal to the full salary at the time of retirement is paid after thirty years of service. In the event of physical or mental disability after ten years of service a pension of one thirtieth of the salary for each year of service is paid. The death benefit amounts to twenty per cent of the salary in the event of death during the first ten years of service, increased thereafter by one per cent of salary. The amount of insurance may rise to a maximum of twice the amount of the salary last received. The fund also makes loans on favorable terms for the purchase of real estate.

Training of secondary school teachers. — Secondary school teachers are prepared in the *Instituto Pedagógico*, established in 1889. The entrance requirements were raised in 1923 to the baccalaureate; in addition candidates must be seventeen years of age, must present a certificate of good health from the physician of the Institute and a certificate of good conduct from the principal of the school that they attended, and in the case of candidates who wish to specialize in the teaching of languages must pass an examination in French, Italian, English, German, or Latin.

In 1925 the enrollment was 575 (188 men and 387 women), distributed as follows among the different subjects:

SUBJECTS	MEN	WOMEN
Spanish	54	98
French	34	72
English	22	79
German	7	9
Italian	4	5
Mathematics and physics	20	27
Biological sciences and chemistry	36	72
History and geography	13	25

The introduction of Greek has been proposed as a compulsory subject for the students of French and Spanish and as an elective for the students of the biological sciences. Latin is compulsory for all language specialists. The practice of the students is conducted in a *Liceo de Aplicación* which will next year become an independent institution and will be replaced by other arrangements for practice directly controlled by the Institute.

The advanced students of the Institute conduct a night secondary school, the Federico Hanssen, a philanthropic undertaking which has been of great benefit to an increasing number of young people who are unable to attend school during the day.

The seminars of the Institute are constantly increasing in usefulness. The Laboratory of Experimental Psychology serves as a medico-psychological clinic for mentally deficient children or those suffering from nervous disorders.

A commission for internal management has been established which consists of a number of students under the leadership of a professor. The purpose of the commission is to organize those measures that are necessary to promote the efficient coöperation between students and teachers on the basis of mutual confidence. The work is distributed among three subcommittees for internal government, studies, and university extension. The organization has contributed greatly to the intellectual, moral, and physical advancement and welfare of both teachers and students.

The Institute is attended by students from many foreign countries, many of whom later return to occupy positions of importance in their own country. Of the native students many who specialize in English continue their studies in the universities of the United States with the help of scholarships and other grants. In return the Institute has requested a grant for the award of scholarships to five teachers of Spanish from the United States, who will continue their study of Spanish and give instruction in English in the institutions to which they will be assigned.

Salaries in secondary schools. — The salaries in secondary schools range from \$7500 to \$15,000 a year for principals and vice-principals, depending on the size of the school and the number of courses offered. The professors are paid a fixed sum for each hour taught per week with a maximum of twenty-four hours per week; each professor is required to give three hours a week without pay for every twelve hours taught to be devoted to such educative activities as may be assigned to him. Principals of schools are permitted to teach up to twelve hours a week with additional remunera-

tion. The secondary school teachers enjoy the benefits of the pension system for public employees.

UNIVERSITY EDUCATION

University education is organized under the law of January 9, 1879, supplemented by subsequent decrees and regulations. Its administration is in the hands of the Council of Public Instruction and the deans and directors of the various faculties and schools. The deans are responsible for the supervision of the educational side, the directors for the internal management of the institutions. The University consists of five faculties: the faculty of philosophy, humanities, and fine arts; the faculty of physical sciences and mathematics; the faculty of medicine and pharmacy; the faculty of laws and political sciences; and the faculty of theology, which is not functioning at present.

The courses in the faculty of philosophy, humanities, and fine arts are given in the *Instituto Pedagógico* and the *Escuela de Bellas Artes*, and are four years in length. The faculty of physical sciences and mathematics includes the schools of engineering and of architecture; provision is made for six-year courses leading to the careers of chemical engineer, metallurgist, electrical engineer, and sanitary engineer, as well as the usual branches in this field; the course in architecture is five years in length. The faculty of medicine includes the schools of medicine, pharmacy, dentistry, and midwifery; the course in medicine is five years in length and is followed by one year of practical work as a requirement for full graduation. The faculty of laws and political sciences, which includes schools of legal and political sciences in Santiago, Valparaíso, and Concepción, gives a five-year course in all the branches of the subjects concerned; the courses were reorganized in 1925 and made more practical,

and a doctorate was created in legal, economic, and social sciences. The total enrollment in the University was 3371.

The University is also engaged in the following activities. It maintains a series of university extension courses and has published for eighty years the *Anales de la Universidad*, which contain a history of secondary and higher education in Chile since 1843. In 1906 a seismological station was opened under F. M. de Ballore, succeeded in 1923 by C. Bobillier. The faculty of medicine is engaged in research on anquilostomiasis in connection with the coal mines. Plans are now being made by which the University will undertake research in the fluctuation of money values and the factors associated therewith, such as loans, the issue of paper money, imports and exports, nitrate taxes, and so on, the results of which will be of service to the government in determining legislation to stabilize the economic situation of the country. Another proposal is to establish an Economic Institute (*Instituto Económico*) on the basis of the existing seminar in economic sciences.

Private universities. — There are two private universities. (1) The Catholic University at Santiago has schools of law, engineering, architecture, and commerce, and a polytechnic course. In 1925 it had an enrollment of 1407 students. (2) The University of Concepción has schools of industrial chemistry, dentistry, pharmacy, pedagogy for the preparation of teachers of English, and medicine, which was first opened in 1923. The enrollment in 1925 was 353.

MEDICAL AND SOCIAL WELFARE

School medical inspection. — The development of the school medical service is one of the most important activities to which the authorities are devoting their attention. Its continued progress has not been checked since its establish-

ment in 1911. The service consists of a central office with a school clinic, a dispensary, and a dental clinic, devoted wholly to the needs of school children and teachers and the supervision of the work throughout the country. Modest as the service is on account of lack of funds, it has forty-five doctors, forty-five clinics, and seventy-five dental ambulances. With additional funds, which it is hoped to obtain for 1926, it is planned to introduce school camps, open-air schools, and the activities of the Red Cross.

Physical education. — The development of physical education and athletics in the country has been due largely to the effective work of the Institute for Physical Education (*Instituto de Educación Física*). The Institute was established in 1906 to prepare special subject teachers in a number of fields including physical education. In 1925 the course, which had hitherto been three years in length, was extended to four years. Candidates must hold the baccalaureate or be graduates of a normal school with a good record. The teachers trained here enter the services of elementary, secondary, and normal schools. In 1924 there were enrolled 172 men and 244 women, and 20 teachers were graduated.

STATISTICS

Cost of education. — The funds for the maintenance of education are appropriated by Congress annually on the basis of budgets presented by the Ministry of Public Instruction and the Ministry of Industries and Agriculture. Under the new Constitution which came into effect in September, 1925, Congress is not permitted to increase the total sums provided for in the budget, but it may reduce them or modify the different items. Except for small sums there are no other resources for education.

The total budget for education for 1925 was \$85,529,645, of which the sum of \$48,626,289 was for elementary educa-

tion. The following sums were spent in 1924: for secondary education \$14,682,013; for normal schools \$3,383,909; for agricultural education \$2,107,120; for higher vocational education \$3,492,310; for commercial education \$1,427,697; for the Institute of Physical Education \$137,020. For the Pedagogical Institute the budget for 1925 provided \$530,695.

Enrollments. — In 1924 the enrollment in the 3357 elementary schools was 437,781 (213,089 boys and 225,692 girls) with an average attendance of 68 per cent; to this number should be added 19,500 pupils in the preparatory courses and practice schools and 65,289 in private schools. Of the 9414 teachers 2307 were men and 7107 or 78 per cent were women.

The enrollment in the secondary schools was 44,547 (13,306 boys and 11,241 girls), taught by 997 teachers in the boys' schools and 1041 in the girls' schools. In the normal schools there were 2507 students (959 men and 1548 women). The commercial schools were attended by 3113 students and the total enrollment in the lower vocational schools was 2992 and 6698 in the higher vocational schools.

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The only sources of information that are available are the publications of the Ministry of Public Instruction and the Ministry of Industries and Agriculture, giving the courses of study for the various types of schools under their control, new legislation, projects for reform, and statistics. For secondary and higher education the *Anales* of the University contain valuable material from time to time.

ENGLAND

BY

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ENGLAND ¹

INTRODUCTION

At the beginning of the year 1925 it appeared that the educational system of England and Wales was about to enter upon an era of stability and continuity, at any rate so far as administration and finance were concerned. The new Government, which had a sufficient parliamentary majority not only to carry out its policies but to anticipate a long period of office, had come into power with a definitely progressive program. The early speeches of the new President of the Board of Education, Lord Eustace Percy, were mainly concerned with the doctrine of "continuity." He foreshadowed a system of procedure by program, under which the local authorities were to submit plans for the development of their system over a period of years. Later in the year these programs were actually called for, to be submitted early in 1926, and to cover a period commencing on April 1, 1927. In the meantime amended regulations for elementary schools, providing for improved staffing and for more space per pupil in new buildings, were coming into operation.

Following upon this encouragement to local authorities the President in a rapid succession of public speeches made an appeal for greater efficiency in all types of school. He emphasized his desire for more systematic provision for the older pupils in elementary schools, for a proper relation

¹ This article continues the account of the educational situation in England given in the *Educational Yearbook, 1924*, pp. 195 ff.

between school and industry, for more attention to practical subjects, and for all-round improvements in organization. He also piloted through the House of Commons a Superannuation Act, which gave great satisfaction to the teachers, and saw an apparently peaceful settlement of the question of teachers' salaries for a period of six years.

There was no difficulty in securing from Parliament the necessary money to meet the Board's and the local authorities' estimates for 1925-26. Consequently at the end of the summer it was generally felt that education had at last escaped from the period of restriction. It appeared that the Board of Education might be expected to take the lead in an active campaign to improve the existing system by making it, first more efficient in all its parts, and then more extensive. The President's speeches had certainly created this impression, although one or two of his criticisms of the existing system had aroused some opposition and resentment. But on November 25 the Board, without previous consultation with the local authorities, issued Circular 1371, the general effect of which was to inform the authorities that along with their development of new services must come a more than compensating economy on old ones. It was suggested that the machinery of administration had become unduly costly, and that much money was being allowed to ooze away in the maintenance of existing schools. Much of the alleged inefficiency was attributed to the system of percentage grants, and a new system which would involve a reduction of the total grant was proposed.

It was at once evident that neither the proposal for economy nor the sudden revision of the grant system was likely to meet with any sympathy from educational bodies. The press was almost entirely hostile, and practically every local authority passed a resolution of protest. Within a week the President issued two explanatory statements to the

press, but parliamentary questions and debates showed that these explanations had not convinced even the political supporters of the Government. In spite of the President's spirited defense of his Circular, it became clear that the new policy could not be put into effect without delay, and without considerable modification in the interests of continuity. Before the end of the parliamentary session representatives of the local authorities visited the Board's offices and submitted certain suggestions with the object of postponing radical changes until consultations could take place. The Board ultimately agreed to consider these suggestions, and on December 23 issued Memorandum 44, virtually withdrawing Circular 1371, urging economy for 1926-27, and promising some change in the methods of apportioning grants within another year. In any case it is to be feared that the atmosphere of financial restraint has returned, and that another disappointing era of retrenchment may be approaching. The fact that the new process appears to be one of pressure or squeezing, while the Geddes' "ax" operated by means of direct cuts, is not likely to make true economy any easier. However much administration is simplified in the interests of efficiency, no large reduction of expenditure can be achieved without withdrawing from present commitments and abandoning half-completed schemes.

ADMINISTRATION OF EDUCATION

Educational finance. — Before considering Circular 1371 in further detail it is necessary to refer to the growing desire of all concerned for a longer view of educational progress than is possible when programs are only made for one year at a time. In order to meet this desire the Board of Education invited the local authorities in April, 1925, to submit comprehensive programs to cover a period of at least three

years from April 1, 1927, and to be accompanied by the most accurate financial estimates available. After considering them the Board hoped "to lay down clearly the general lines of educational advance in each area, and to assure local authorities that even if the rate of advance had to be regulated by financial limitations, it would not be interrupted or diverted." At the same time it was emphasized that development must not be suspended during the period of nearly two years in which programs were being prepared and considered.

Procedure on such lines was heartily welcomed on grounds of financial stability and continuity, and most authorities were beginning to draw up their proposals when their confidence was so severely shaken at the end of November. Their expenditure had fallen considerably from the maximum of 1921-22, and had probably reached a minimum in 1924-25. The fall was due to the limitation of expenditure following upon the Geddes' Report, and particularly to the reduction of teachers' salaries by five per cent from April, 1923. A further small saving in salaries accrued from April 1, 1925, but, with the encouragement of the Board, most of the authorities had already begun to expand their systems and to make good the ground lost in the preceding three years. They were certainly not contemplating any serious reduction of expenditure.

But in Circular 1371 the Board announced that the grants for 1926-27 onwards would not be calculated on the usual percentage basis for that year's expenditure. In place of percentage grant a 'block grant' was proposed, which was to be based on the amounts actually paid in 1924-25 less certain appreciable deductions. The lack of warning, the very considerable reduction of the state contribution below what was expected, and the change in the method of calculation, all contributed to create a real estrangement between

the authorities and the Board. Fortunately there is hope of temporary agreement on the understanding that percentage grants will be maintained on carefully regulated estimates for 1926-27, and that consultation will take place on the method by which the government contribution shall be determined for the period of procedure by program after April 1, 1927. The situation is further complicated by the fact that, under the Superannuation Act of 1925, the authorities will have to contribute towards the cost of teachers' pensions from April 1, 1928.

In some quarters, the apparent desire of the Board to abolish percentage grants is regarded with favor. Their present proposal, to fix the block grant by taking a former grant calculated on a percentage basis and making certain deductions from it, is naturally regarded as unsatisfactory, and the former Secretary of the Board has indicated in the press that he does not consider the result to be a true block grant. But apart from these objections it is often argued that a block grant on a suitable basis might be the best form of state aid to local education. It would facilitate administration by eliminating the detailed scrutiny of the smallest local schemes by the Board. Regulations could be simplified so that they laid down minimum standards of efficiency rather than the maximum financial provisions which could be recognized from grant. The business of the Board would then be simply to see that the schools and the systems of the authorities were efficiently conducted, and to give advice and carry out inquiries in connection with problems of more than local importance. But no acceptable basis for a block grant has yet been suggested, and the question will need to be thoroughly explored if a new system is to be announced before the end of 1926. Possibly the Meston Committee, which was referred to in the *Educational Year-book*, 1924, p. 201, may be revived and may present a report.

Inspection and supervision. — A special problem which arises out of the Board's new policy is that of the inspection and supervision of the actual work of the teachers in the schools. Some of the larger authorities maintain staffs of inspectors whose functions do not appear to differ greatly from those of the Board's inspectors, and there have been occasional suggestions that overlapping takes place. It is unlikely that the Board's system of inspection will be either abolished or drastically curtailed, since it does not even now provide for one visit a year to every school, and official reports on the work of the schools are still less frequent. Some agreement as to the relative functions of His Majesty's inspectors and of local officers appears likely to emerge, and thus to unify the system of supervision. English teachers are probably subject to less dictation from outside authority than those of any other nation in the world, and the tendency will certainly be to maintain this position.

PRESCHOOL AND KINDERGARTEN EDUCATION

One of the economies proposed by the Board in Circular 1371 was to reduce the grant to each authority by a sum based on the number of children in its schools under five years of age. This number had increased considerably in the preceding two years, the figures being: March 31, 1923, 165,684; March 31, 1924, 211,348; March 31, 1925, 221,800 (approx.). It was apparently considered that, since the attendance at a school of very young children is not a uniform practice throughout the country, the cost should fall mainly on local funds.

The Board did not pronounce an opinion on the value of this attendance, which is acknowledged to depend on local conditions. They did, however, suggest that money might be saved by extending the practice of part-time attendance

up to the age of about six. Their proposal and their arguments aroused very strong opposition in the industrial areas, where early attendance at school is the recognized custom. In these areas the choice is often one between school and either the streets or an unsatisfactory home. Bad housing conditions and the necessity for many mothers to work outside the home are the two chief arguments against retaining children in the home, and both of these are ignored in the suggestion for part-time attendance. The only real alternative to recognizing the attendance of under-fives in ordinary schools is to provide special institutions (day nurseries and nursery schools) for them, which will not be possible if expenditure is to be reduced.

ELEMENTARY EDUCATION

Organization. — Largely as a result of the change of policy in 1924 there was distinct evidence of advance in the work of the elementary school in 1925. There was considerable progress in reducing the size of classes, and schemes for the improvement of curricula, premises, and equipment were inaugurated in nearly every area. The change from a Labor to a Conservative Government appeared to be accompanied by a slight tendency to encourage schemes for the reorganization of elementary schools rather than for the establishment of more secondary schools.

The "black list" of unsatisfactory school premises, which was in preparation in 1924, and came into the hands of the authorities in 1925, is already providing formidable problems for the religious bodies who own most of the defective buildings. Some of them will no doubt be unable to comply with the demands made on them, and will have to close their schools, or lease them to the local authorities. Others will only be able to make their schools suitable for greatly re-

duced numbers. The easiest solution in many cases appears to be the erection by the local authority of one new provided school to relieve the difficulties of a group of nonprovided schools. When this solution is adopted, it is usual for the senior pupils, or a selection from them on grounds of attainment, to be accommodated in the new school, which then becomes a senior or a central school.

Although difficulties connected with religious instruction are preventing very rapid progress, there is no doubt that the grouping of senior children is becoming more attractive as the need for well-organized instruction in the last two or three years of elementary school life is realized. Conditions under which pupils in these years have to be grouped together in one class, in a school with no special equipment for science teaching or practical work, are now being held responsible for a certain lack of efficiency, especially in dealing with the brighter pupils. Lord Eustace Percy in one of the earlier speeches expressed his own opinion in the following words :

I literally do not think that, generally speaking, for general cultural purposes, we are now giving any education in the vast majority of our elementary schools from the age of 12 on, which it is really worth while for any child to stay at school to get, and when you have said that you have leveled a criticism and a charge against the elementary schools of this country which it is vitally important that all should work together to wipe out as soon as possible.

This outspoken comment naturally produced many denials and criticisms, especially from teachers' organizations, and its force was considerably modified by later explanations. There is no doubt, however, that it was intended to justify the effort of the Board of Education to improve the provision which is made for the older pupils in elementary schools.

The Members of the Board have not committed themselves specifically to the establishment throughout the country of schools (commonly called central schools) for selected older pupils only, but they have undoubtedly encouraged the opening of such schools in suitable centers. They have also formally issued a document in which they give their views on school organization, arising out of the important changes made by the Education Act of 1918. In future all schemes of school planning must make provision for advanced instruction of children over eleven by giving opportunities for suitable classification and organization. Except in very large schools, organized on the traditional basis of "boys, girls, and infants (under 7)," or "mixed and infants," this policy involves some new organization and points to the desirability of "junior" (including infants) and "senior" schools.

The age of eleven, which is now the accepted time for commencing secondary education, is generally agreed to be the best age for commencing senior work in elementary schools. For a given school population, division at this stage would provide about twice as many juniors as seniors, and it is therefore suggested that where possible two separate and parallel junior mixed departments should contribute to the same senior department. In other cases a division at about nine years of age is suggested. Nine is preferable to ten because it allows a full two-year course in the senior department for children who are transferred at the age of eleven to secondary or central schools. For junior departments of children under nine, only women head teachers would be accepted. In senior schools of sufficient size the separation of the sexes into separate departments is encouraged.

Organization on these lines is not yet being strictly imposed and the proposals may be revised in the light of experience. They have already caused considerable unrest

among teachers' organizations, since they obviously affect very materially and often adversely the future prospects of present school staffs. It is nevertheless agreed that the whole scheme represents a definite effort to stimulate the more systematic organization which is needed during the last years of compulsory school attendance.

The question of religious instruction. — As a result of the issue of the "black lists" and the general demand for grouping and reorganization of schools, the question of the non-provided or voluntary denominational schools continues to be the subject of most discussion. The owners of these schools nominate two thirds of the managing body, which has the sole right to appoint teachers. The managers also control the religious instruction, subject to a provision that pupils of other denominations may be excepted from it at the request of their parents. In return for these privileges the owners are responsible for the maintenance of the school premises, apart from fair wear and tear caused by the use of rooms for school purposes.

Schemes and proposals of the kind outlined in the *Educational Yearbook, 1924*, continue to be discussed and published, not merely by religious denomination, but by local authorities; but none is yet in active operation. The surrender of some rights of management in return for full maintenance of the school premises is a general feature of all schemes, but the main stumbling block is the retention of denominational religious teaching in the affected schools. The owners naturally desire such teaching, and the authorities appear willing to make considerable concessions. The teachers' associations, however, continue to be strongly opposed to any religious tests for their members, and they are equally opposed to any "right of entry" which would entitle persons not on the school staff to take part in the instruction. The final success or failure of all the proposals

will certainly depend on the extent to which the support of teachers can be obtained for the necessary legislation.

Curriculum. — As the number of teachers with superior qualifications is gradually increasing, the range of studies in elementary schools is being extended and widened, especially in well-organized and well-equipped senior departments. Instead of one teacher being responsible in each class for all the subjects of the curriculum, specialization is being more widely introduced and more advanced work is being attempted. The pupil who has attended an up-to-date school till he is fourteen will often be found to have read a fair selection of literary works in his own language, to have learned the rudiments of algebra and geometry, and occasionally to have commenced the study of a foreign language. About half the boys and girls over eleven receive practical instruction, generally for two and one half hours per week, in handicraft or domestic subjects. The table which follows

STANDARDS	Boys		Girls		
	V-VI	VII-VIII	V	VI	VII-VIII
Religious instruction	150	150	150	150	150 mins.
English	460	200	255	255	255
Mathematics	230	60	150	150	150
Geography	90	30	115	105	105
History	100	70	105	105	115
Citizenship			70	50	60
Physical exercises and games	60	60	105	105	105
Music	60	75	120	120	120
Drawing	120	120	60	60	60
Physical science	60	105	—	—	—
Nature study	—	—	105	115	105
Needlework and handwork .	—	—	145	145	145
Domestic subjects	—	—	150	150	150
Handicraft (woodwork, etc.)	150	150			
Individual work (according to choice)	45	505			
Intervals and recess	125	125	100	100	100

gives examples of the division of time for elder boys and girls, but it must be understood that very wide variations are possible, and are actually encouraged by those who advise the head teachers on these matters.

Special attention continues to be given to the curriculum of rural schools, partly because of the difficulty of grouping them and partly in order that their work shall be intimately related to rural conditions of life.

There have been interesting controversies and discussions on the subject of partisan teaching, especially on political topics. Those critics who have leveled general indictments against the whole teaching profession have generally failed to produce instances for confutation; but in one case a teacher who had been personally accused of teaching dangerous political doctrines brought her accusers to court and secured so satisfactory a verdict that the number of indefinite complaints has been very considerably reduced.

An interesting and valuable development in the education of girls is now taking place by the coöperation of teachers with school medical officers and nurses. The latter are often also in charge of the infant welfare work in their districts and it is possible with their assistance to give valuable training to girls of thirteen to fourteen on the care and management of infants. The work has always formed a small part of the courses in "domestic subjects"; but the new arrangements are adding greatly to its value, the opportunity of seeing demonstrations with real babies instead of dolls making it much more impressive.

Compulsory attendance. — There is still a strong movement for an increase in the age at which compulsory attendance ceases. Many young people do not succeed in obtaining employment on leaving school at fourteen and attempts to deal with them in other ways have not been entirely successful. The local authorities have power, with the

approval of the Board of Education, to raise the leaving age by by-law to fifteen, but only two rural counties have yet done so. The remainder of the authorities appear to consider that uniform action is essential if serious confusion is to be avoided, and neither Parliament nor industry appears to be prepared to agree to such action at present.

School buildings. — During recent years the type of building erected for elementary school purposes has undergone very considerable alterations. The modern elementary school usually consists of a large assembly hall with a sufficient number of classrooms of 400–500 square feet of floor area. Wherever the site permits, it is a single story structure, built round a quadrangle with a paved exercise ground and extensive playing fields. The quadrangle is surrounded by a covered veranda on which the various rooms open, and thorough ventilation is readily provided by suitable openings on opposite sides of the rooms. Much interest has been shown in the new types of buildings being constructed in Derbyshire on this principle. They are used for both elementary and secondary schools and estimated to cost no more than the ordinary type.

Freer ventilation has its effect on the heating system, which has in the past been usually provided by low-pressure hot-water circulation in pipes somewhat inconveniently situated near the floor. Experiments are now being made with subfloor heating and also with new materials for school floors. The floor problem is an important one in a damp climate, where children wear heavy footwear.

The cost of building is still relatively high, being from £30 to £45 for every child to be accommodated. The higher figure applies to senior schools where larger classrooms are required, and additional rooms for practical work in science, handicrafts, etc., must be provided. The price of a prewar school was about £13 per place.

INTERMEDIATE EDUCATION

Central schools. — In the *Educational Yearbook, 1924*, it was indicated that this form of education was represented in England and Wales by "central" schools, which are elementary schools for selected senior pupils who cannot, or do not wish to, enter secondary schools. The number of central schools continues to increase as they are beginning to be regarded as especially suitable for those whose education is not to be prolonged beyond the age of sixteen. The pupils are usually looking to employment as skilled artisans, in commercial pursuits, or in offices. A four-year course is usually provided, or alternatively a three-year course capable of extension, so that the pupil may leave the school at the end of any term in the fourth year. In addition to the subjects of the normal elementary-school curriculum the pupils may receive instruction in a foreign language, shorthand, bookkeeping, and elementary economics, or in more advanced science and mathematics with practical work in geometry and a wider range of handicraft. Girls may also specialize in domestic or needlecraft subjects, and in the latter case, special attention is usually paid to their training in art. It will be seen that these curricula have a vocational outlook which distinguishes them clearly from those of secondary schools, but in practice it is not found that the vocational aspect predominates as much as it does in the junior trades schools for pupils of about the same age, which are part of the system of technical education.

On March 31, 1924, there were over 10,000 pupils in attendance at public elementary schools over the age of fifteen, of whom about one third were in London. It may be assumed that the majority of these older pupils were in central schools. The elementary-school regulations make it very difficult to retain a pupil beyond the sixteenth birth-

day and there is a growing desire that this limitation should be removed. In fact the unification of the different types of postprimary school is one of the first problems which will need attention if the government continues its campaign for efficiency of administration. It is anticipated that the Consultative Committee of the Board of Education, which includes representatives of teachers, local authorities, and universities, will shortly report on this subject which ought to provide a basis for future policy.

SECONDARY EDUCATION

In the opinion of Mr. H. A. L. Fisher the number of secondary-school places which should be provided in England and Wales is 650,000. This figure is probably based on an allowance of about twenty places for each 1000 of population, after making some deduction for the large number of schools which are not aided by the Board of Education or the local authorities. On October 1, 1924, there were 359,144 pupils enrolled in grant-aided schools, of whom well over one third did not pay any fees. A high-water mark of 363,717 had been reached in 1922 when many schools were overcrowded, and in 1923 the figure was 358,351. The number in attendance is therefore practically stationary, in spite of the steady provision of new accommodation. Final plans for thirty-six new schools were approved in the year ending March 31, 1925, but the high cost of building has delayed the really rapid progress which many authorities would otherwise be prepared to make. The distribution of schools is consequently still very unequal, and in many large towns there is a serious shortage of accommodation.

When Mr. Fisher's scale of provision is attained, approximately one child in every five will be educated in a secondary school, and it may therefore be regarded as a maximum scale for immediate purposes. Wider schemes, like that of

the Labor party, will not only be financially unattainable for some time, but will also require the evolution of a greater variety of curricula. Even now it appears that a great extension of the free-place system will be necessary if enrollment is to increase at all rapidly, and there are already fourteen local authorities in whose area some or all of the secondary schools are free. In 1924 the provision of free places was stimulated by an extra grant to local authorities for this purpose, but the withdrawal of the grant in 1925 has tended to remove the stimulus.

Along with the provision of free places the authorities have also to consider the payment of maintenance grants to those who need them. The conditions which should determine the award of this form of assistance are still the subject of much controversy. In some quarters it is apparently considered that they are rewarded for special proficiency or attainments, and should be given without consideration of financial necessity. On this basis free places would be awarded to the more promising pupils who were prepared to accept them, and the remainder would be filled by those of somewhat inferior attainments who were able to pay the fees. The opposite view is that the minimum standard of admission should be the same for all, and that when it has been fixed, fees should be remitted and aid given in accordance with the pupil's need and assistance. The Board of Education is obviously inclined to the latter view and its *Regulations for Secondary Schools* give expression to this inclination. There is no doubt, however, that the possession of moderate means is still a great advantage to a parent who wishes his children to enter a secondary school.

Apart from differences of curriculum secondary schools are distinguished from senior and central elementary schools in several important respects. All secondary schools require a formal promise from their pupils to remain at school until

they are at least sixteen years of age. Elementary schools may in some cases keep them until sixteen, but not as a rule longer. The cost of secondary-school buildings is more than twice as great as that of elementary schools, and the gross cost of maintenance is at least in the same proportion. The superior social and other amenities produced by these differences are responsible for the preference of many parents for the secondary school, and of some bodies of ratepayers and taxpayers for the central school. The possibility of overlapping between the two types of school, which has previously been mentioned, continues to attract attention, so far as it affects pupils under sixteen.

Beyond the age of sixteen the most striking and distinctive feature of modern secondary schools is the growth of advanced courses. The *Annual Report* of the Board of Education for 1923-24, which contains an interesting account of the recent development of secondary schools, describes among other features the remarkable progress in this field since 1917, illustrated by the following table of courses :

	A	B	C	D	E	
	SCIENCE AND MATH- EMATICS	CLASSICS	MODERN STUDIES	CLASSICS WITH MODERN SCIENCE	GEOG- RAPHY	TOTAL
1917-18	82	20	25	—	—	127
1920-21	216	35	152	—	—	403
1921-22	230	37	181	—	—	448
1922-23	228	37	179	1	—	445
1923-24	230	37	188	4	1	460
1924-25	235	37	188	6	3	469

Modern studies include modern languages, literature, and history.

Advanced courses in secondary schools are definitely of post-matriculation grade and consequently overlap to some

extent the work of the universities. The natural consequence is a growing demand for greater recognition of the work of the schools when their pupils proceed towards university degrees.

The great majority of the secondary-school pupils, however, do not enter universities. Many of them find employment in such work as accountancy, banking, etc., but the suitability of the instruction for the future vocation of the pupils is often questioned. Lord Eustace Percy has declared that while the secondary school system ought to be used for training leaders for all the professions and industries and businesses, it is in fact being used to train the subordinates in a few "respectable" industries. The Headmasters' Association in an attempt to deal with this problem some time ago approached the Federation of British Industries and received a rather discouraging reception. The deputation was informed that manufacturers, particularly engineers, had organized their businesses mainly on taking in boys at the age of fourteen, and that they were not in a position to offer attractions to boys of sixteen comparable with those offered by banks or insurance companies. This situation will provide one of the main problems for consideration by the Committee which is referred to in the following section.

VOCATIONAL EDUCATION

No striking changes are to be recorded in the field of technical education. The slight but steady recovery from the heavy decline in 1921-22 continues, and the reorganization of the very complicated examination system is making progress. The few day continuation schools continue to do good work, but there is no general movement to increase their number. The Ministry of Labor has announced the opening of a number of training centers for unemployed

young men between nineteen and twenty-five (and in the case of exsoldiers up to twenty-nine) of a class who have difficulty in finding employment because they have had no opportunity of learning a skilled trade. Two of the centers will be residential and their courses will be adapted to the requirements of agriculture and of work in overseas dominions.

The Minister of Labor and the President of the Board of Education have jointly appointed a committee to inquire into the educational system in relation to the requirements of the trade and industry, with particular reference to the adequacy of the arrangements for enabling young persons to enter into and retain suitable employment. The committee is a small one and does not include any teachers or educational officers. Its constitution has accordingly been severely criticized in spite of explanations that the inquiry is to be conducted mainly from the industrial point of view. If it presents even a moderately helpful report on its terms of reference, it will assist considerably in solving what Mr. H. A. L. Fisher has called "the great unsolved problem of industrial democracy."

TEACHERS

Training and certification. — Lord Burnham's Departmental Committee on the training of teachers for public elementary schools presented its reports in May, 1925. The limitation of the Committee's terms of reference by the use of the words "public elementary schools" was somewhat unfortunate in view of the general desire to break down the barrier between the different school systems. The report is nevertheless very exhaustive, as it deals with questions of supply as well as training, and like all documents of its kind contains a mass of interesting historical information. The Committee of eighteen members is not unani-

mous in all its conclusions and a powerful " memorandum of dissent " is signed by four important members.

On the subject of recruitment there is general agreement that the amenities and economic outlook of the profession should be made the main attractive force; that teachers themselves should be important recruiting agents; that the policy of giving financial assistance to prospective teachers below the age of sixteen should be abandoned; and that an advisory committee representing the central and local authorities and the teaching profession should be set up to assist in securing an adequate supply of young teachers. The dangerous effect of sudden changes in educational policy in matters affecting the annual number of teachers required is also pointed out. In dealing with qualification the *Report* suggests that the ultimate aim should be to staff all schools with certificated teachers, and that all teachers should be trained. Special concessions are proposed to provide opportunities of training for the older uncertificated teachers at present in schools, but the Board of Education have already accepted the recommendation to abolish the examination by which untrained teachers can at present obtain the certificate. The first recommendation dealing with training must be quoted verbatim in order that the peculiarities of the existing system may be appreciated. It reads: " That, as far as practicable, intending teachers should receive their secondary education in secondary schools." Apart from the light which it throws on the difference between education of secondary grade and instruction in secondary schools as defined by the Board's *Regulations*, this sentence means that special institutions such as pupil-teacher centers, and senior or central elementary schools should no longer be recognized as places where future teachers may be educated. It is intended that the secondary school course should last till the age of

eighteen and be followed by a training college or university course without interruption by any probationary period as a student teacher. Those somewhat drastic limitations are the subject of a reservation by the Director of Education for Manchester, who would permit central-school pupils to enter the profession and also require much more actual practice in the schools before the completion of training.

On the postsecondary period of training there is strong divergence of opinion. The majority of the Committee, after careful consideration, reject the proposal that all teachers should complete a university course followed by one year of purely professional training. They also reject a proposal for a one-year course following the passing of a second examination (representing two years' postmatriculation work) in a secondary school. Their own recommendation is a two-year college course in subjects which are studied primarily with a view to teaching them in school, with possibly one other subject studied at least as much for itself as for teaching purpose. This standard course is apparently to be capable of extension for a third year, either immediately or after an interval of teaching, and some students are to be encouraged to take four-year courses comprising degree work and subsequent professional training. The " memorandum of dissent " recommends that all training courses should be postacademic and purely professional, and that they should last for one year only. Entrants should have obtained at least a pass in a second school examination and preferably a university degree.

The remainder of the *Report* deals with further training in short courses, and with the involved question of training-college finance. The distribution of the burden of cost between the state, the local authorities, the voluntary bodies who maintain some of the training colleges, and the student himself has hitherto been complicated and led to inequali-

ties. Minimum fees would be fixed and local authorities would be encouraged to assist students by maintenance allowances and loans. The Board would pay grants to local authorities in respect of the aid given to students and also to the colleges themselves, taking care that any local authorities who maintained colleges did not suffer undue disadvantage by training students from the areas of authorities who did not maintain colleges. The minority hold that students should pay for their own academic training with the help of liberal public provision of scholarships, etc., which should, however, be open ones and not earmarked for intending teachers. They also declare that the cost of the training colleges where the postacademic work is carried on, in as far as it falls on public funds, should be defrayed entirely by the state and not at all by the local authorities.

It will be seen that the *Report* is not in any sense of the word a decisive document, and subsequent discussion has not settled any of the doubtful points. But there is at least sufficient agreement to provide a program for the next four years and thus to allow the accumulation of further experience in the light of changing conditions in the school.

Salaries.—Lord Burnham's personal arbitration, following the failure of the Burnham Committees themselves to agree upon a new scale of salaries, has resulted in the substitution of a "Burnham award" for the standard scales. The award is a most ingenious compromise, since it effects economies which are not regarded as inadequate by the authorities, while it does not cause dissatisfaction by making reductions in the present salaries of existing teachers. It is difficult to estimate exactly how the new scales will compare financially with the older ones, but the general impression appears to be that the difference between the demands of the two sides has been averaged. On this basis, if the scales were put into full operation at once, the total expenditure on salaries would

fall about halfway between "95 per cent Burnham," which was in operation on March 31, 1925, and a sum equivalent to about "90 per cent Burnham," which is what the authorities were believed to desire. There will be some delay before the full economy is achieved, because those teachers who were being paid more than their new-scale salaries on March 31, 1925, will "mark time" till they are entitled to an increment on the new scale.

An examination of the tables which follow will show that the maximum and the minimum salaries have been left almost unchanged and that the saving accrues from two important changes in the method of adding increments to the minimum. The first is the introduction of a probationary year, so that no increment is added till after two years' service. The probationary year in itself lengthens practically all the scales; but the second change, the diminution of all increments for women, lengthens their scales still further. The result is that throughout their service, and not merely at the maximum of the scales, women's salaries are approximately four fifths of those of similarly qualified men teachers. From this it appears that the comparative shortage of men teachers, at a time when the number of women entering the profession is on the whole satisfactory, was an important factor in determining the new scales. As might be expected in this circumstance, criticisms of the award have mainly come from women teachers, many of whom must "mark time" for several years before they receive their next increment.

The term of the award is six years from March 31, 1925, and thereafter from year to year subject to notice of one year from either the authorities or the teachers.

Along with the scales Lord Burnham submitted several recommendations, of which two are specially important. The *first* was an appeal to the Board of Education to adjust

their grants so that no authority could gain financially by paying salaries on a basis lower than that of the scale which was allotted. This recommendation will be considered in more detail in a later paragraph. The *second* was a suggestion that the Board should recognize the expenditure by each authority of a prescribed sum for making additions to scale salaries for special purposes. The object of the second recommendation was to remove the cast-iron features of the scales and to give authorities some freedom to deal with special circumstances. The Board of Education have accepted it in a somewhat restricted form, but nevertheless in a manner which undoubtedly gives new freedom for the recognition of special services and special qualifications in all types of school.

It should be remembered that the scales only apply to schools in which local authorities accept responsibilities for the salaries paid. These form, of course, an overwhelming majority of all types of institutions; but there are many important secondary schools which have no connection with the education authorities. In such schools it may be assumed that at least equivalent, and generally higher, scales of salaries are in force.

The facing table of salary scales for certificated teachers in public elementary schools and for secondary school teachers will indicate, without the detailed explanations that accompanied their publication, the general principles on which they are based.

The first of Lord Burnham's recommendations already referred to was accepted by the President of the Board of Education in the following terms:

As regards the first recommendation, I am anxious not to relieve the local education authorities, who employ the teachers, of the responsibility which properly rests upon them in the matter of salaries. I have every reason to

PUBLIC ELEMENTARY SCHOOLS—CERTIFICATED TEACHERS

		YEAR	MIN- IMUM	IN- CRE- MENT	MAX- IMUM	DURA- TION IN YRS.	PRO- MO- TION INCR.	MAXIMA FOR PRINCIPALS				
								I	II	III	IV	V
Scale I	Men		£	£	£	£	£	£	£	£	£	£
		1921	172½	12½	325	13	20	357½	390	422½	455	487½
	Women	1921	160	12½	260	8	15	286	312	338	364	390
		1925	168	12	312	13	18	348	378	408	438	468
Scale II	Men	1921	172½	12½	340	14	20	374	408	442	476	510
		1925	168	12	330	15	18	360	393	426	459	492
	Women	1921	160	12½	272	9	15	300	328	356	384	412
		1925	150	9	258	13	13½	288	315	342	369	396
Scale III	Men	1921	182½	12½	380	16	25	418	456	494	532	570
		1925	180	12	366	17	24	402	438	474	510	546
	Women	1921	170	12½	304	11	20	335	366	397	428	459
		1925	162	9	288	15	18	318	348	378	408	438
Scale IV	Men	1921	200	12½	425	18	25	467½	510	552½	595	637½
		1925	192	12	408	19	24	450	489	528	567	606
	Women	1921	187½	12½	340	13	20	374	408	442	476	510
		1925	180	9	324	17	18	360	390	423	456	486

SECONDARY SCHOOLS—ASSISTANT TEACHERS

	YEAR	GRADUATES			DURA- TION OF SCALE IN YRS.	NON-GRADUATES			DURA- TION OF SCALE IN YEARS	
		Min.	Inc.	Max.		Min.	Inc.	Max.		
		£	£	£		£	£	£		
London Area										
	Men	1921	290	15	550	18	210	12½	450	20
		1925	276	15	528	18	204	12	432	20
	Women	1921	275	15	440	11	197½	12½	360	13
		1925	264	12	420	14	192	9	342	18
Rest of England and Wales										
	Men	1921	240	15	500	18	190	12½	400	17
		1925	234	15	480	18	186	12	384	18
	Women	1921	225	15	400	12	177½	12½	320	12
		1925	216	12	384	15	174	9	306	16

believe that they are now considering the award with a full sense of that responsibility, and I do not think that I need intervene in their deliberations further than to say that the Board would feel bound to make adjustments of grant in any case in which they considered that the efficiency of the educational service was prejudiced or endangered by unreasonable action on the part of every local educational authority.

After the publication of this statement the allocated scales for elementary schools were accepted without much question by 310 out of the 317 local authorities. Some of the seven dissentients will no doubt fall into line, but two of them have already received decisions from the Board of Education on the lines of the President's statement. One borough has been informed that its grants will be curtailed so that it will not be able to benefit by paying less than the allocated scale III.

The important county of Essex has received different treatment. Its area extends from the London and Middlesex (Scale IV) boundaries on the south and southwest to those of Scale I and Scale II counties on the north and west, and its communities and their schools vary accordingly. Before the first allocation of scales the Essex authority had a separate agreement with its teachers which resulted in a scale of a hybrid character derived from the published Burnham figures, instead of Scale III, which was considered suitable by the Burnham Committee. The agreement expired in 1925 and the authority appeared to wish for a renewal on a similar basis. But neither the other authorities nor the teachers in other areas were anxious to encourage any exception to the general rules. Their objection was based upon the grave danger that one exception might justify another and thus break down the national agreement. The Essex teachers therefore refused to renew their separate

bargain with the authority, who informed the Board of Education of the circumstances and of the reasons for declining to pay the allocated scale. After consulting representatives of the authority and the teachers at the same time, the President declared that in his opinion the action of the authority was not unreasonable, and that he did not propose to impose any penalty by withholding the grant.

At the time of writing it is difficult to see what the next move will be. Circular 1371 has threatened the whole Burnham system by proposing changes in the present system of grants. The authorities as a whole declared that their acceptance of the arbitration award was based on the assumption that the system of grants would not be changed in a sense unfavorable to them. If they are not ultimately satisfied on this point, there may be further attempts to set up special scales. If the grants are maintained, the Essex problem will require extraordinary patience and diplomacy on the part of all engaged in its solution, if a serious dispute is to be avoided.

Pensions. — The expected Teachers' Superannuation Act, which was passed in August, 1925, follows on the whole the lines suggested by Lord Emmott's Committee in 1923. The pensions are to be contributory and the scope of the schemes has been widened to include other educational service, such as inspection and administration. The teacher's contribution is to be five per cent of his salary; and from April 1, 1928, employers, including local authorities, are also to pay a similar sum, which in the case of the authorities was to have ranked according to the arrangement then made for a sixty per cent grant from the Board. The original opposition of the teachers to the abolition of the previous noncontributory scheme was not maintained during the discussions in Parliament, but the resistance of the authorities to the proposal that they should contribute remained to the end. They never

formally acquiesced, although their opposition was weakened by a slight reduction in their burden (from fifty to forty per cent of the amount provided from the public funds) and a postponement of its incidence till 1928. What the effect of a change in the system of grants will be is uncertain.

Judged by the standards which are well-known in the United States the new system is still imperfect on the financial side. Retiring allowances are not to depend on contributions, but on length of service and on average salaries during the last five years of service. The future cost is thus difficult to determine, and the situation is not improved by the refusal of the Government to establish a pension fund. It is true that they have promised to keep a theoretical account, but they do not propose to set aside the sums received in contributions to provide for future requirements. By their procedure the full burden will be postponed for twenty or thirty years and there is some danger that succeeding governments may find it necessary to increase contributions in order to maintain the scale of allowances. There is, of course, no doubt that, considering teachers' pensions as a separate social burden, the soundest financial policy would be to set aside all contributions to help pay the retiring allowances in respect of services to which the contributions apply, and to meet all liabilities for past noncontributory service out of the national revenue. The Government, however, considers that it is relieving its successors of great responsibilities by the payment of war pensions and by heavy contributions towards the liquidation of war debts. It holds that the effect of its action on present budgets justifies it in asking a later generation to assume additional responsibilities on behalf of the teachers. It remains to be seen what the effect of this action will be in the long period which must elapse before all accrued liabilities have been met. After that period it is possible that the ten per cent

contribution may be more than sufficient to provide the benefits laid down by the Act.

Tenure and status. — Three judicial decisions were given in 1925 on the subject of the employment of married women as teachers. Some authorities have recently adopted the policy of dismissing them from service in council (provided) schools, and the actions were brought to test the power of the authorities to dismiss teachers for reasons which were not regarded as educational. The first decision was in favor of the teacher, but an appeal in this case and a first decision in another have apparently vindicated the authorities. The decisions do not appear, however, to give authorities any power to direct the managers of nonprovided schools to dismiss married women from their service.

There is another legal question which has caused the authorities some anxiety, since it has an important effect on their schemes of reorganization. The Education Act, 1921, provided that a teacher whose office is lost by "virtue of the Act or anything done in pursuance or in consequence of the Act," is entitled to compensation. One teacher whose services were not required after the reorganization of two schools received the usual notice to terminate her engagement. She claimed compensation and was awarded £44 per annum (payable by the authority) on a decision of the Treasury, from which there was no right of appeal. As a result of the discussions following this decision it appears that the question of the right to compensation in future cases may perhaps still be open to question, but that once the right is established there is nothing to prevent the Treasury from fixing the amount.

MEDICAL AND SOCIAL WELFARE

In the *Educational Yearbook*, 1924, page 235, figures were quoted to show the shortage of accommodation for defective

children in special schools. Further provision of such schools is now regarded as the most urgent problem of the school medical service, and both the Board of Education and the local authorities were actively engaged in preparing for developments in 1925. One of the most regrettable consequences of a new policy of economy might be to postpone much-needed schemes for ameliorating physical defects. There is a general disposition to emphasize specially the needs of cripples who are not yet so well provided for as most of the other groups, in spite of the great benefits which they derive from careful orthopædic treatment.

The *Annual Report* for 1924 of the Chief Medical Officer (Sir George Newman) contains a number of interesting special chapters, all of which illustrate the great social value of a well-organized medical service. The health of the rural child was referred to last year, when somewhat alarming evidence of a decline in physique was adduced. A much more extensive inquiry has now confirmed the feeling that not only town children need careful medical supervision. The rural children are still as a whole physically superior to those in towns, and there is nothing which can be described as widespread decadence; but there is a substantial degree of physical impairment. The remedy must be supplied largely in the homes; but the schools must be called upon to help by the establishment of ideal sanitary conditions, adequate arrangements for dealing with wet clothing, and proper attention to the midday meal.

An anthropometric committee is now engaged in important inquiries into factors governing the growth and development of healthy children, and other inquiries are proceeding on enlarged tonsils and adenoids, defective vision, goitre, and the incidence of mental deficiency. The results of inquiries of this character based on masses of authenticated informa-

tion are now among the most valuable products of medical inspection of school children, as it is conceived and carried out in England and Wales.

UNIVERSITY EDUCATION

As a result of a special appeal from the universities, the Government agreed at the beginning of the year to increase by about £250,000 the annual sum set aside for distribution between them, on the understanding that no further increase shall be expected for at least five years. This welcome assistance does not, however, solve all the financial problems of institutions of university rank. The University Grants Committee in their *Report* for 1923-24 emphasize the necessity for university autonomy, and point out that along with increased aid from public funds there must come increasing external control. They, therefore, urge upon university authorities the importance of increasing their endowment funds and regarding them as the central source of their revenue. In fact they remind universities that the Government's grants are "to supplement and encourage local efforts" and that the extent of local support will be an important factor in deciding upon the allocation of treasury grants.

Since all the universities are in serious need of buildings both for teaching and residential purposes, of equipment, and of additions to their libraries, they have appealed freely in 1925 to local authorities and to the public. Two separate appeals each to raise £500,000 were inaugurated within a few weeks of each other, and efforts to discover additional sources of income are continually being made.

In spite of the financial difficulties of existing universities the movement for an increase in their number is still active, and it is anticipated that a full charter will shortly be granted to University College, Reading, which is well known for its agricultural work. As new institutions develop it will be

necessary to adopt some degree of specialization, so that there may not be too much dissipation of energy in small departments for highly specialized work. For this purpose frequent consultations are taking place and cordial relations between the various institutions are developing rapidly.

While there is a rapid development of specialized work in the advanced courses of secondary schools, the universities are apparently feeling their way towards a broadening of their courses of study. In many cases the course for a first degree in honors is held to be too narrowly specialized and too limited in its outlook. Pass degrees, on the other hand, though they offer a wider choice of subjects, are not of a sufficiently high standard for the abler students. Examples are consequently appearing of honors courses which are specially suitable for teachers and others who wish to attain high qualifications without confining their studies to one or two closely allied subjects.

CURRENT PROBLEMS

The Board of Education and the local authorities have been confronted during the year with a question of some importance arising out of the educational discussions of the Trades Union Congress. For many years the principal agency for promoting adult education has been the Workers' Educational Association, a body which has always declared itself to be nonpolitical and nonsectarian. Although composed mainly of manual workers, it has nevertheless attracted members and sympathizers from the professional classes. Its instruction has mainly been conducted under university auspices and generously aided by the Board of Education and the local authorities.

There are, of course, other agencies for adult education of a nonparty character, but their work is not nearly so extensive as that of the Workers' Educational Association. On

the other hand, in connection with various branches of the labor movement, a number of organizations exist which aim frankly at "class conscious" education, and a long controversy has been carried on between the two groups on the value of partisan teaching.

The necessity for some plan to consolidate the arrangements for the education of manual workers has made it desirable to attempt some form of compromise in order that the trades unions may assist in the work of recruitment and organization. A scheme was accordingly approved at the Trades Union Congress in 1925, which is believed to embody an agreement between the two contending parties. The official aim of the scheme is :

To provide working-class education in order to enable the workers to develop their capabilities and to equip them for their trade union, labor, and coöperative activities generally, in the work of securing social and industrial emancipation.

The propriety of continuing to give assistance from public funds to work under such a scheme was naturally called in question as soon as the object was defined, and controversy has again broken out about the exact meaning of the declaration quoted above. The Secretary of the National Council of Labor Colleges has made it clear that in his view the scheme is one for "education against capitalism" and that his colleagues intend to see that it is inspired on that basis.

In spite of the defense of the Workers' Educational Association that its university tutors can continue to work under the scheme without committing themselves to any party allegiance, it may be regarded as certain that a conservative government will require some new safeguards as a condition of any future aid from public funds. The reassuring factor will probably be found in the personality of the tutors who conduct classes under the Board's *Regula-*

tions. Hitherto they have enjoyed complete freedom from political tests, and they have had no instructions to avoid contentious topics in teaching such subjects as economics and industrial history. The universities have, however, taken care to assign to the work none but men and women of unquestioned authority in their respective subjects. The atmosphere of the classes has consequently been truly educational and not propagandist, and it is unlikely that any body of teachers will appear that possesses the necessary educational attainments and are at the same time prepared to conduct their classes on a purely " anticapitalist " basis. The principal spokesman of the Workers' Educational Association in the discussions with the Board of Education and the local authorities is the Master of Balliol, who is hardly likely to associate himself with any narrowly defined educational scheme.

STATISTICS

1. *Local education authorities.*

	ENGLAND	WALES	TOTAL	
London	1	—	1	For higher and elementary education.
Counties	48	13	61	
County boroughs	78	4	82	
Boroughs	124	6	130	For elementary education only. Higher education is provided by counties in which they are situated.
Urban districts .	37	7	44	
Total	288	30	318	

2. *Elementary schools, 1923-24.*

	SCHOOLS	ENROLLMENT	AVERAGE ATTENDANCE
Public elementary schools .	20,743	5,759,363	5,143,664
Certified efficient schools . .	31	1,838	1,599
Certified special schools . .	530	38,662	33,439
Nursery schools	26	1,131	852
Total	21,330	5,800,994	5,179,554

Public elementary schools all receive grants and are usually maintained by local authorities. In 1922-23 there were only fifty schools not so maintained. Of the 20,743 schools in 1923-24, 8976 were council or provided schools, attended by about two thirds of the pupils, and 11,776 were voluntary or nonprovided schools.

TEACHERS (1922-23)

Public Elementary Schools	Men	Women	Total
Certificated, trained . . .	29,019	54,161	83,180
untrained . . .	7,405	26,135	33,540
Uncertificated	2,062	30,819	32,881
Supplementary	—	11,448	11,448
Total	38,486	122,563	161,049

Certified efficient schools . .	13	65	78
Certified special schools . .	417	1,816	2,233
Nursery schools	—	47	47

3. *Secondary schools.* — No statistics are available for schools not inspected by the Board of Education. Those which are inspected are divided into two groups: (1) non-grant-earning schools, which are merely recognized as efficient, and (2) grant-earning schools. In the first group is included a number of schools for younger pupils (mainly from 9 to 13 years of age) described as preparatory schools. Of the 1264 grant-earning schools in 1922-23, 617 were council schools, 67 Roman Catholic schools, 479 foundation and other schools, and 101 Welsh intermediate schools. In 1924-25 a provisional estimate gives 1281 grant-earning schools with 359,444 pupils.

Of the 18,885 teachers employed 8663 were men and 9822 were women. Of the men 6510 were graduates and

1922-23	SCHOOLS	BOYS	GIRLS	TOTAL
Schools on Grant List . . .	1,262	181,791	172,374	354,165
Schools not on Grant List .	336	29,547	26,409	55,956

2153 nongraduates; of the women 5668 were graduates and 4154 were nongraduates.

4. *Trade and technical education.* — This type of education is given in (1) technical institutions with full-time courses of at least two years' duration, attended generally by students over eighteen years of age. (2) Junior technical schools or preparatory trades schools for boy and girls between thirteen and sixteen; the courses are two or three years in length. (3) Day technical classes giving full-time or part-time specialized courses. (4) Nautical schools giving full-time preparation for nautical careers. (5) Schools of art giving full-time or part-time courses, and art classes less highly organized than the schools. (6) Day continuation schools. (7) Evening continuation and technical classes. (8) Part-time classes for teachers. The same technical school or college may include practically every variety of work for which statistics are given herewith:

1922-23	NUMBER	MEN	WOMEN	TOTAL
Technical institutions . . .	43	4,135	407	4,542
Junior technical schools . .	89	10,613	1,793	12,406
Day technical classes . . .	104	6,459	7,003	13,462
Nautical schools	6	1,375	—	1,375
Schools of art	181	22,643	22,596	45,239
Art classes	49	1,393	1,994	3,387
Day continuation schools .	82	12,390	10,927	23,317
Evening schools	3,871	338,260	274,720	612,980
Part-time classes for teachers	265	4,560	19,079	23,639

5. *Universities.* — The following figures are for 1923–24 and include Scotland :

(a) Full-time students.

	MEN	WOMEN	TOTAL
England	21,250	8,517	29,767
Wales	1,642	1,021	2,663
Scotland	7,060	3,402	10,462
Total	29,952	12,940	42,892

Of the total enrollment, 42,892, 39,202 students come from the British Isles ; 2435 from the Empire, and 1255 from elsewhere ; 9551 lived in colleges and hostels, 14,989 in lodgings, and 18,352 at home ; 4163 students were at Oxford and 4977 at Cambridge. There were in addition 14,245 part-time students and 7948 extramural students in tutorial classes. By faculties the full-time students were distributed as follows :

Arts	18,981	Technology	4,709
Science	7,402	Agriculture	856
Medicine and dentistry . .	10,864	Unclassified	80

(b) Finance.

	TOTAL INCOME	EXPENDITURE
	£	£
England	2,608,977	2,599,381
Wales	284,047	274,776
Scotland	694,312	695,175
Total	3,587,336	3,569,332

These figures were analyzed as follows :

INCOME	PER CENT	EXPENDITURE	PER CENT
Endowment	11.6	Administration	9.9
Subscriptions	2.5	Departmental maintenance	65.4
Grants		Maintenance of premises .	12.4
Local authorities . . .	12.0	Other expenditures	12.3
Government	35.5		
Fees	26.6		
Examination fees	7.0		
Other income	4.8		

6. *Cost of Education.*

(a) Net expenditure of public funds (Government grants and local rates) by local authorities.

(1) *Elementary Education.*

	1922-23	1923-24	1925-26
	£	£	£ (estimates)
Teachers' salaries	42,188,000	41,019,000	41,500,000
Administration	2,623,000	2,578,000	} 10,000,000
Other expenditure	7,718,000	7,503,000	
Loan charges	3,043,000	2,934,000	3,000,000
Special (medical) services .	2,852,000	2,696,000	3,000,000
Total	58,424,000	56,730,000	57,500,000
Board of Education grants	32,602,954	32,200,563	31,237,000

Administration includes cost of all services for organization, superintendence, enforcement of attendance, etc. Other expenditure is mainly for school maintenance (supplies, fuel, light, cleaning, repairs, etc.). Special services include all expenses of school medical work, including loans and administration; special and nursery schools are part of the medical service. The cost to public funds per child in average attendance for 1925-26 is estimated to be £11.9.3.

(2) *Higher Education.*

	1922-23	1923-24
	£	£
Training of teachers	378,000	324,000
Secondary schools	4,912,000	4,459,000
Technical schools	3,153,000	2,935,000
Loan charges	717,000	718,000
Aid to students	1,571,000	1,583,000
Administration	648,000	601,000
Other expenditures	276,000	227,000
Total	11,655,000	10,847,000
Board of Education grants . . .	4,882,609	4,574,489

The estimates for 1925-26 are £11,250,000 and the Board of Education grant £4,740,000. The expenditure for higher education cannot be classified in the same manner as for elementary education. The gross expenditure is much greater than the figures given above, since appreciable sums are received in fees, etc. Aid to students includes fees paid to institutions and allowance for books, traveling, or maintenance in respect of all holders of scholarships and free places, and of intending teachers.

(b) Expenditure of the Board of Education (estimated for 1925-26): (1) grants for elementary education to schools maintained by local authorities, £72,000; (2) for higher education to schools maintained by local authorities, £1,958,000; for aid to students, paid direct by the Board (state scholarships, etc.), £174,000; total, £2,204,000.

(c) Other expenditures of the Board: In addition to the total grants payable to local authorities and others the Board of Education vote includes for 1925-26 the provisions shown in the following table. The pensions will probably increase for a few years until the local authorities begin to contribute their share.

Teachers' pensions	£3,904,690
Administration	455,879
Inspection and examinations	358,916
Higher education of service men	8,100
Museums (3)	190,934
Royal College of Art	13,971
Total	4,932,490

The total expenditure of the Board (that is, grants plus other services) is, therefore, estimated to be £43,113,230. Receipts (mainly teachers' contributions towards superannuation) amount to £2,460,476. The total parliamentary vote for 1925-26 is, therefore, £40,652,754.

(d) Other government departments also make certain payments for educational purposes, the general effect of which can be gathered from Table 9 in the *Educational Yearbook, 1924*, p. 242.

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FRANCE

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FRANCE ¹

THE COMMON SCHOOL MOVEMENT

The problem of the common school (*école unique*) continues to occupy general attention. A Commission consisting of members of Parliament and representatives of the teachers and administrators in elementary, higher elementary, and secondary education was appointed by the Minister of Public Instruction to consider the most practical means for making available all types of educational opportunities to children of ability without any reference to their social position. Many sessions have been held by the Commission since its appointment in December, 1924. The commission was compelled to admit that unfortunately, owing to the financial situation, it was out of the question for the time being to think of making secondary and higher education free. It was of the opinion, however, that the time had come to approximate this ideal at once and to bring about as far as possible, in the schools of the state, at least, some unity in courses of study, in the teaching personnel, and in the student body.

The Commission recommended that education of elementary grade, whether given in elementary schools or in the lower classes of the secondary schools, should be imparted by teachers of the same type and with the same methods. Effect has been given to this recommendation by recent decisions which have checked the appointment of the special class of teachers of the elementary classes in secondary

¹ This article continues the account of the educational situation in France given in the *Educational Yearbook*, 1924, pp. 245 ff.

schools, and prescribe the use of the elementary school courses of study in these classes.

The Commission was also of the opinion that the age of compulsory attendance should be extended to fourteen. A bill to give effect to this proposal will shortly be presented in Parliament.

SECONDARY EDUCATION

The new course of study, 1925. — The purpose of the Bérard reform of 1923 was to restore unity in secondary education, which had been destroyed by the reform of 1902; it attempted to avoid the dangers of too premature specialization and to introduce the most appropriate means for securing a sound general education. It was objected, however, without denying the merits of the new system, that it assigned an excessive importance to the classical studies by requiring all students in the secondary schools to study Latin for four years and neglected to provide for modern subjects except in the last three years of the whole course of seven years. It was feared that such a system would render secondary education inaccessible in practice to gifted pupils from the elementary schools, in spite of the provision of scholarships, and would in the end become the privilege of sons of the well-to-do middle classes. Accordingly the new plan of June 3, 1925, was devoted to the reintroduction of a complete cycle of modern secondary studies, parallel to that of classical studies and of the same length (seven years).

This course had already been put into effect for the first three years of the secondary school and was now extended to begin in the fourth year in October, 1925. It was organized in such a way as to avoid raising insurmountable barriers between the classical and modern language sides, and to establish to the greatest possible extent unity of training for all students. In the first six years of the course,

from *Sixième* to *Première*, about two thirds of the time schedule (13 to 15 hours according to the class) are common to the two sections (section *A* being the classical and section *B* the modern); they follow the same courses of study, and as often as possible are taught together in the same classes and by the same teachers in the following subjects: French language and literature, history and geography, a modern foreign language, and mathematical, physical, and natural sciences. Beyond this the students of section *A* have Latin for six hours a week in *Sixième* and *Cinquième*, five hours in *Quatrième*, and four each in *Troisième*, *Seconde*, and *Première*, begin Greek in *Quatrième*, and may drop this language and take up foreign literature and civilization in *Seconde*. The students in section *B* have additional work in French, devote themselves to practical work in history, geography, a modern foreign language, and natural sciences, begin the study of a second modern foreign language in *Quatrième*, and foreign literature and civilization in *Seconde*.

It is impossible here to enter closely into the interesting details of the reform of 1925 which took care to borrow from past experience and introduced without doubt some clever innovations. To understand thoroughly the spirit which inspired the authors, it is essential to turn to the official texts and the instructions addressed to the teachers (see Bibliography). For the first time a genuine effort has been made to organize a thorough course in modern humanities; the students of section *B* have been placed on a footing of strict equality with those of section *A*. No attempt has been made to give a utilitarian character to the special subjects studied and an effort is made to secure general liberal training. On the other hand, all the students of both sections must for six consecutive years follow the same courses of study in the mathematical, physical, and natural sciences, less than those of the old sections *C* and *D*, and less elemen-

tary than those of the old sections *A* and *B*. The aim throughout is to secure a balanced education and to provide for all students, irrespective of their immediate preferences and apparent capacities, the benefit of a liberal education on both the literary and scientific sides. Finally, more than in the past, the chief purpose of the teachers of modern foreign languages will be to train the judgment of their students at least as well as their memory. This does not mean a return to the mistakes, condemned by experience, of teaching foreign languages without speaking them or of surrendering the advantages of the direct method. This should not be the exclusive aim; the intensive study of foreign languages and civilizations as organized in the new courses of study will broaden the intellectual horizon of the students, will supplement the classical studies of students in section *A*, and in some measure take the place of classical studies for those of section *B*, who specialize in modern languages, of which one must be English or German. In a word, the reform will help to make modern language study a classical training in the broad sense of the term.

The students, then, freed from the anxiety of making a vocational choice too prematurely, will peacefully pursue for six years the common or equivalent subjects. It will not be until they have passed the first part of the baccalauréat that they will be called upon to make a choice according to their tastes and aptitudes in favor either of the literary or scientific careers. No matter from which section they come, the students may, at their choice, bring their secondary studies to a close either in the *classe de Philosophie* or in the *classe de Mathématiques*. Here, too, the programs are common in history and geography, modern languages, natural sciences, drawing, and even logic and ethics. In philosophy, however, psychology, logic, ethics, and metaphysics claim about half of the weekly time schedule (eight and a half

hours); two hours a week are devoted to literary studies (French, Latin, and Greek), while the time given to sciences is curtailed (three hours, required, in physics and chemistry; two hours, required, in natural sciences; and two hours, optional, in mathematics). The students in mathematics, on the other hand, devote nine and a half hours to mathematics and geometrical drawing, four and a half hours to physics and chemistry, and two hours to natural sciences.

Reform of secondary education for girls. — The almost complete identification of secondary education for girls with that for boys, so often demanded by teachers and parents, is rapidly on the way to realization. Since the decree of March 25, 1924, the normal length of the course for girls in *lycées*, *collèges*, or secondary courses for girls has been raised to six years. It was decided that girls might be prepared at their choice either for the first part of the baccalaureate (with or without Latin) or for the old *diplôme de fin d'études*. The programs and time schedules were made analogous to, but not identical with, those for the boys' schools. A revision of these regulations was made necessary by the recent reintroduction of a complete modern cycle in the schools for boys. Accordingly the *arrêté* of July 10, 1925, succeeded in giving a new cause for satisfaction to the increasing number of determined advocates of identification of courses. From now on the candidates for the baccalaureate in classics will have the same number of hours a week as the boys in Latin; in classes in which the enrollment is less than thirty the number of hours will be five in *Sixième* and *Cinquième*, four in *Quatrième*, and three and a half in the remaining classes; the reduced time schedule, provided in March, 1924, will only remain in force in classes with twenty or less. Similar provisions have been made for the courses in modern foreign languages in the case of all candidates for the baccalaureate, classical or modern. Finally, students prepar-

ing for the *diplôme* will have the same time schedule as the boys in section *B* in all classes up to and including *Troisième*. Identity of time schedules is, of course, accompanied by identity of courses of study. One important difference should be mentioned — that candidates for the *diplôme* are required to study only one modern foreign language.

VOCATIONAL EDUCATION

Although seriously affected by the financial condition of the country, the organization of vocational education is being actively promoted both by the public authorities and through private initiative.

A national school of petroleum and combustible liquids, supported by the Ministry of Commerce, has been organized in place of the Petroleum Institute of the Faculty of Sciences at Strasbourg, with which the new school continues to be associated. A sixth vocational school (*école professionnelle*) was opened in October, 1925, at Tarbes in the Pyrenees region, and preparations are being made for another school of the same type at Morez in the Jura. At Auvergne the high school of commerce of Clermont-Ferrand has established a second school for hotel managers.

The number of institutions of an elementary level has grown in an equally remarkable fashion. On January 1, 1925, the Under-secretary for Vocational Education had the following schools under his charge: 84 practical schools of commerce and industry for boys, of which 28 were articulated with higher elementary and secondary schools; 5 crafts schools for boys; 22 practical schools of commerce and industry for girls, of which 3 were articulated with higher elementary schools; 6 schools for hotel employees; 10 vocational schools in Alsace-Lorraine; and 13 in Paris. These institutions included 1033 specialized sections preparing for 142 different trades. They were attended by

30,352 pupils, of whom about two thirds were enrolled in industrial sections. In addition the private schools recognized by the State were attended by 5543 students.

The Under-secretary's department also assisted 542 centers for vocational training (*cours professionnels obligatoires*), distributed among 85 departments and attended by 159,638 students. There were offered in these centers 4235 courses adapted to local needs and covering 141 different types of activities.

Vocational guidance. — Increasing attention is being given to the problem of guiding pupils who leave the elementary schools into vocations better adapted to their inclinations and their physical, intellectual, and moral characteristics, taking into account family circumstances and the status of the labor market. The present problem is to meet the crisis in apprenticeship, and for this reason the organizations, public and private, interested in vocational guidance were, by the decree of September 26, 1922, placed under the Under-secretary of State for Vocational Education. At present more than half of the departments of the country have offices for vocational guidance, of which about sixty receive state aid. They are not all organized on a uniform plan; some are independent; others are attached to employment bureaus, or chambers of trade, commerce, or apprenticeship; while others are managed by craft organizations, labor unions, or alumni associations. In some cases their activity is limited to the local city or group of communes; in others they cover a whole department. This flexible system makes it possible to give special attention to the particular needs of a locality or industry, and it can be adjusted to changes and modifications suggested by experience. The results up to the present, imperfect and incomplete though they are, give a favorable promise for the future, and the number of parents who seek the advice of

the bureaus is constantly increasing. Much is being contributed to the success of the movement for vocational guidance by the active interest of representatives of the teaching and medical professions and of men of affairs.

SCHOLARSHIPS

It has not been possible to establish that ideal of true democracy — free education in all its branches. So far as the financial conditions of the country permit a movement has been begun in this direction by the decree of January 9, and the *arrêté* of February 27, 1925, by which the whole system of national scholarships has been reorganized. Henceforth candidates for higher elementary, secondary, or technical education will be submitted to the same written and oral examination. They will be divided into two groups according to age and the class to which they belong; those under thirteen years of age will compete in the first group; those between thirteen and fourteen in the second group. No allowances will be made for age, and if a candidate is in a class in advance of his age, he will be examined in the subjects of that class. The examination for the first group will cover the subjects of the middle stage in the elementary school course or of *Septième* in a secondary school; for the second group the examination will cover the subjects of the upper stage of the elementary school, the preparatory course of the higher elementary and practical schools, and *Sixième* of the secondary schools.

Candidates who have done satisfactorily in the competition will be graded on the basis of the marks obtained in the examination and their scholastic career in general (*livret scolaire*) on the one hand, and on the other on the basis of family circumstances, the number of children in the family, and its general moral and social standing. The classification will be made by a departmental committee of nine mem-

bers including the prefect of the department or his delegate, the inspector of the academy, representatives of the three branches of education concerned and of the *Office des Pupilles de la Nation*, and two representatives of families chosen by associations of employers and labor organizations. The documents are sent immediately to a higher commission on national scholarships (*Commission Supérieure des Bourses Nationales*), which consists of the director, two assistants, two general inspectors, and two teachers from each branch of education concerned. The commission has the right, if necessary, to change the classifications submitted by the departmental committees. Finally, the awards are made by the Minister of Public Instruction in the order determined by the two bases employed for classification, and the amount of the scholarships is fixed in accordance with very definite rules.

Several types of scholarships are provided: (1) Boarding scholarships reserved for children of families that do not live in or near to a town that has the desired school. (2) Maintenance scholarships or scholarships for half-boarders in cases where the candidates live in the town in which the school is located. (3) Supplementary maintenance scholarships for pupils who already hold a full or part scholarship for full or half board. (4) Nonboarding scholarships, which may be supplemented by maintenance scholarships, to be held in a secondary school.

It is understood that after a year's experience the holder of a scholarship may be transferred, on the advice of his teachers, and upon the request of his parents or with their consent, from one type of school to another. In such cases the amount of the scholarships may be revised.

In general these provisions represent a real advance. They help to facilitate the access of the most gifted pupils to the highest types of education, by allowing their parents

to take into account more than ever before their bent and capacities. The introduction of maintenance scholarships in secondary schools is a particularly happy innovation, inspired by sound principles of democracy. Finally, the bases used for classification remove almost all dangers of arbitrariness in making the awards.

It is too early to draw any conclusions on this new system which has only been in force for one year. The figures that follow do not furnish any basis for deduction. In 1925 there were 29,861 candidates, of whom more than half (17,344) expressed a preference for the higher elementary schools in which the courses are shorter and more definitely practical; about 30 per cent (11,074) wished to enter a secondary school; only 1443 were planning to enter a technical school.

Serious criticisms have been passed on the examination regulations introduced by the *arrêté* of February 27, 1925, and some of them seem eminently justified. For example, it is almost impossible to submit candidates from so many different schools to exactly the same examination tests; moreover, absolute identity of examinations, if it could be realized, would be detrimental to some candidate or other. It has been noticed that in both groups the candidates who come from the elementary schools are older than those who have already entered a secondary school, thus giving the latter an advantage both in marking and classification. As it is desirable not to begin secondary education too late, there is a further tendency to encourage the young candidates. In all probability these criticisms, which do not affect the principle of the reform, will be considered; it has already been announced that new regulations will shortly be issued to correct defects that have been revealed by experience. No suggestions appear to have been made anywhere of the possibility of employing psychological tests.

PHYSICAL EDUCATION

The problem of physical education continues to be one of great importance. Its supervision was placed in the hands of an inspector-general of the Ministry in 1925. By an *arrêté* of January 19, 1925, the principle was established that all secondary school pupils shall have two hours of physical education a week throughout their course, just as pupils in elementary schools do. Unfortunately the financial stringency has prevented the strict application of this principle in practice. In any case the time has not been adequate to secure a sufficient number of qualified teachers, possessing the required technical preparation as well as a good general education.

An important plan for reform has been submitted for consideration by the consultative committee on physical education. The existing certificates of ability to teach gymnastics (both lower and higher), which are now required of candidates for appointment in secondary schools, will be replaced by the certificates of ability to give physical education (*certificats d'aptitude au professorat de l'éducation physique*) of a much higher standard. There will be two grades of the certificate, lower and higher. Candidates for the lower certificate must have passed the first part of the baccalaureate or hold the *diplôme* or *certificat de fin d'études secondaires* from girls' secondary schools, or the *brevet élémentaire*. The examination will include a written test in addition to the existing oral and practical tests; the preparation for this certificate will be given in the normal schools. Candidates for the higher grade of certificate must hold the lower certificate, must have passed the baccalaureate, or must have obtained the *diplôme d'études supérieures*. They will be prepared for the examination in the Regional Institutes for Physical Education (*Instituts régionaux d'Educa-*

tion Physique), which will be attached to the universities and be associated with the faculties of medicine. The course will include, among other subjects, anatomy and physiology, the special application of these subjects to physical education, psychology, and education.

Until this plan is fully carried out the higher course for physical education in the University, which was organized in 1923, is tending to be used more and more for the preparation of teachers in place of the military school of gymnastics at Joinville. It is conducted each year during August and the first week of September at the Lycée Michelet at Vanves (Seine), near Paris. The school has large grounds, well-managed athletic fields, a swimming pool, etc. The work of the course, which is both theoretical and practical, includes anatomy and physiology, generally given by members of the medical corps, practical work in these subjects and in anthropometry, and training in gymnastics, sports, games, and swimming. The course also serves as a center for study and demonstration to discover the essential elements of a system of physical education suitable for all types of educational institutions. Each year at the beginning of September teachers and administrators from all branches of education, limited by the decree of June 18, 1925, to 150, come to attend an informational course of a week; they attend lectures on education and the sciences connected with physical education, and observe lessons in athletics and games performed by the regular students of the course. It is hoped that in this way sound methods of physical education will gradually be spread throughout the schools of the country.

UNIVERSITY EDUCATION

Reform of legal and economic studies. — Since the War there has been a definite reorganization of the studies in the

faculties of law, and the system of state examinations has been considerably modified. It is intended to raise the general standards of the examinations so as to require evidences of a sound general education and ability to think as well as a good memory. Another aim is to permit the most advanced students to specialize as early as possible and to make the French faculties accessible to foreign students.

The Licence en Droit. — The decree of August 2 and the *arrêté* of August 8, 1922, defined in detail by the decrees of February 6 and July 27, 1924, have determined the general course of study and the examinations that lead to the *licence en droit*. The fundamental studies of the faculty of law are distributed as follows :

First Year. — Roman law (2 semesters); civil law (2 semesters); political economy (2 semesters); general history of French law (2 semesters); constitutional law (1 semester).

Second Year. — Civil law (2 semesters); administrative law (2 semesters); penal law (2 semesters); political economy (2 semesters); Roman law (1 semester).

Third Year. — Civil law (2 semesters); commercial law (2 semesters); civil procedure (1 semester); private international law (1 semester); law of finance (1 semester).

In addition students must elect two semester courses from among those offered by the faculty and subject by the decision of the Ministry to an examination in the third year. The *licence* is only granted on the basis of examinations at the end of each year of the course. Each examination consists of a written part, which is eliminatory, and an oral part. The regulations for the examination are carefully and minutely prescribed.

Diplomas of higher studies and reform of the doctorate. — A decree of May 2, 1925, has established diplomas of higher studies in the faculties of law analogous to those

already in existence in the faculties of letters and sciences. The diplomas are intended to encourage advanced studies in the field of the legal and associated sciences ; the four that have been created are as follows : in Roman law and the history of law ; in private law ; in public law ; in political economy. They can be obtained after an additional year of study beyond the *licence en droit*. They are granted on the usual basis of written and oral examinations, one of which may be in a subject studied outside of France.

As a result of this innovation it has been considered necessary to change the requirements for obtaining the doctorate in law (in legal sciences or in political and economic sciences). Candidacy for this degree is only permitted to those who have already obtained at least two diplomas in higher legal studies and present a printed thesis on a subject related to one of the fields in which a diploma was granted.

Reform of medical education. — The requirements for the medical profession have not been changed ; they still include the possession of the baccalaureate, the certificate in physical, chemical, and natural sciences (*P.C.N.*), which may be obtained in the faculty of sciences after one year of study, and the successful pursuit of the professional course which lasts five years. Recently the organization of the *P.C.N.* has been attacked ; some would abolish it entirely, others would make it more definitely medical in character and place the preparation for the certificate under the faculty of medicine. While nothing has been done on this point, the professional course proper has again been reformed, as it was in 1878, 1893, and in 1911. The reform effected by the decree of October 10, 1924, aims not only to bring medical studies up to the stage reached by the progress of the sciences, but also to group the various courses more methodically with a view to simplification without affecting the quality of the theoretical and practical training.

The first year will be devoted wholly to anatomy, histology, and embryology, and the second to a more intensive study of the biological sciences in relation to medicine, that is, physiology, physics, and chemistry, including pathological chemistry and bacteriology. The first two years will thus constitute a preliminary cycle of morphological and biological studies as a fundamental basis for further professional training. The work of the third year will be considerably lightened and will permit more thorough and intensive study of such subjects as surgical and medical pathology, pathological anatomy, obstetrics, experimental medicine, and elementary parasitology. The fourth year will be devoted to surgical and medical anatomy and operative medicine with introduction to practice, and general, medicinal, and surgical pathology. For the fifth year there will remain therapeutics, pharmacology, hygiene, forensic medicine, and medical ethics.

The organization of clinical training and practical work has been subjected to the same desire to simplify the course. The students will from the start be initiated into applied diagnosis in medicine and surgery, but the genuinely practical work will be reserved for the last three years. The work has been divided into two groups: (1) general medicine and surgery (one semester for each) and obstetrics (three months) and (2) ophthalmology, otorhinolaryngology, skin and syphilitic diseases, psychiatry, contagious diseases, children's diseases (two months each). This simplification will mean greater homogeneity in the subjects that have to be prepared for the examinations that are held at the end of each year of the course.

Creation of a doctorate in veterinary medicine. — By a law of July 31, 1923, defined by the decree of March 28, 1924, the difficulty in the way of granting this degree was removed. The veterinary schools at Alfort, Lyons, and

Toulouse are under the Ministry of Agriculture, which could only grant a professional diploma. Since only faculties under the Ministry of Public Instruction are entitled to award the doctorate, the above law and decree have instituted a doctorate in veterinary medicine to be granted at the end of the courses pursued in the veterinary schools by faculties of medicine in Lyons, Toulouse, and Paris. The degree is granted on the basis of a thesis recommended by the director of the school attended by the student and approved by the faculty which conducts the examinations.

Reforms in the faculties of sciences. — In addition to their functions of advancing and teaching the sciences, these faculties are devoting themselves increasingly to the practical applications suited to the needs of modern society in the mathematical, physical, chemical, and natural sciences. To meet this new conception of their functions there have been established within the faculties of sciences a number of institutes which rival the old special schools like the *Ecole Polytechnique* and the *Ecole Centrale des Arts et Manufactures*, etc., and aim to prepare for industrial careers and in particular for the various branches of engineering. Only a few of these can be mentioned here: Institutes or Schools of Chemistry in Paris, Bordeaux, Lille, Lyons, Marseilles, Nancy, and Toulouse; the Polytechnic Institute (electrometallurgy and electrochemistry) and School of Paper-manufacturing at Grenoble; the Institute of Tannery at Lyons; the Electromechanical Institute at Lille; the Wine Institute and School of Radiotelegraphy at Bordeaux; the Institute of Technology at Clermont-Ferrand; the Agricultural Institutes at Nancy and Toulouse; the Fuel Institute at Montpellier; the Higher National School of Petroleum at Strasbourg, etc.

Supplemented in this way by flexible and active organizations the faculties of sciences are taking an important place

in the intellectual and economic life of the country; at the same time the variety of courses offered will prove attractive to students from foreign countries. Numerous university diplomas are granted at the close of these courses and can be obtained more easily than the state diplomas.

By a degree of April 30, 1923, and an *arrêté* of June 23, 1925, a new state degree, *Titre scientifique d'Ingénieur-docteur*, has been created to promote research in the applied sciences. It is open to engineers and candidates holding diplomas from the great special schools and the institutes of the university faculties, and is granted on the basis of original research conducted for two years in a higher educational institution and on the presentation of a printed thesis. This degree does not confer any privileges like those accompanying the doctorate in sciences, but if the thesis is highly commended, it may be presented for the doctorate in the faculty of sciences.

Reform of the *licence ès lettres*. — This degree, which is granted by the faculties of letters on the basis of advanced studies and which is required of all teachers in secondary schools for boys and of all candidates for the doctorate in letters and for the *agrégation* to teach in secondary schools, has been subjected to serious criticisms. Since 1894 the old *licence ès lettres*, which was confined to literary studies, has been replaced by specialized *licences*, such as literature, modern foreign languages, history and geography, and philosophy. The result, it is felt, has been to lead to too intense specialization and the neglect of general culture by the students. A certain deterioration in the literary work has been observed with alarm, and the faculties themselves are beginning to feel the *crise du français*, which has affected secondary education. Finally, the rush of young women to the higher studies, for which they are not always well prepared, and the general mobilization which for several years

interrupted the intellectual work of young France, have contributed to a regrettable lowering of standards. The question has also been influenced by the influx of foreign students to the French universities; in general their secondary preparation has not been the same as that of the native students and the study of classical antiquity has not been their chief concern; these students wish to learn France at first hand, to know something of the country and its civilization, to gain an appreciation of its intellectual genius and its past in literature and art.

For these reasons a reform of the courses and the diplomas has been deemed necessary. Two inquiries conducted by the faculties concerned in 1917 and 1918 have resulted in well-defined conclusions. It was decided to replace the old classical *licence* by a more flexible *licence* made up by grouping various certificates of higher studies together and permitting the students to substitute more intensive study in the French language and civilization for the ancient languages and classical antiquity. The new plan was established by two decrees issued on September 20, 1920, and explained in detail by *arrêtés* published on the following day.

The faculties of letters now grant certificates of higher studies according to the general or special work pursued. Each of these certificates may be obtained, irrespective of previous qualifications or nationality, after a semester of study and after an examination which consists of at least one written and one oral test. But not more than three certificates may be obtained on these conditions. Only candidates who have the baccalaureate or its equivalent may proceed to a fourth certificate which entitles them to the *licence ès lettres*. Arrangements may be entered into with foreign governments for the recognition of two semesters of work and two certificates obtained in foreign countries, but

in all cases the fourth certificate must be granted by a French faculty.

More difficult standards are imposed on French candidates who wish to obtain positions in secondary schools. These must obtain a special *licence* known as the *licence d'enseignement*, for which certificates must be presented in one of the following groups :

1. Philosophy : general history of philosophy ; psychology ; logic and general philosophy ; ethics and sociology.
2. Letters : Greek ; Latin ; French literature ; grammar and philology.
3. History : ancient history ; history of the middle ages ; modern and contemporary history ; geography.
4. Modern foreign languages : classical literature ; foreign literature ; philology ; practical studies.

There are thus two types of certificates of higher studies : the *certificats des licences d'enseignement*, for which all faculties prepare, and the *certificats d'études supérieures libres*, the number of which varies with the importance and variety of courses offered by the faculties. Thus there are 31 certificates offered by the University of Paris, 12 by Lille, 7 by Nancy, 28 by Strasbourg, etc.

STATISTICS

Elementary education. — *Public Schools.* — In 1924 there were 73,438 schools distributed as follows : 22,845 for boys ; 22,949 for girls ; 23,921 mixed ; and 3723 maternal schools. The attendance in 1923-24 was 3,175,639 in the elementary grades and 280,868 in the maternal schools. *Private Schools.* — There were in all 13,222 schools, including 2876 for boys, 9226 for girls, 426 mixed, and 694 maternal schools. The attendance is not available.

Higher elementary education. — This type of education was given in 1924 in 1397 *cours complémentaires* (717 for boys,

668 for girls, and 12 mixed), and in 502 higher elementary schools (285 for boys, 212 for girls, and 5 mixed). The attendance in the higher elementary schools was 73,400 (39,309 boys and 34,091 girls).

Normal schools. — There were, in 1924, 88 normal schools for men and 88 for women.

Secondary education. — In 1924 there were 111,000 boys in the secondary schools, of whom 73,000 attended 122 *lycées* and 38,000 were in 245 *collèges*. The total enrollment of girls was 51,000, distributed among 69 *lycées*, 96 *collèges*, and 39 *cours secondaires*. The total number of boys and girls in the secondary schools was 162,000.

Vocational education. — The following vocational schools were attended in 1924 by 30,352 students, not including those in the first two types of institutions listed here: national schools of arts and crafts, 6; national vocational schools, 6; practical schools of commerce and industry, 84 for boys and 22 for girls; craft schools for boys, 5; schools for hotel employees, 6; vocational schools in Paris, 10; vocational schools in Alsace and Lorraine, 13.

Universities. — Law, 15,325 (14,302 men, 1023 women); medicine, 9624 (7988 men, 1636 women); sciences, 10,531 (9283 men, 1248 women); letters, 7165 (4295 men, 2870 women); pharmacy 2895 (1966 men, 929 women). The total attendance was 45,540 (37,834 men and 7706 women).

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GERMANY

BY

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AND

SCHULREFORM

GERMANY¹

INTRODUCTION

The development of stable policies has been prevented during 1925 by the uncertainties in the political relations abroad and the fluctuations in the political conditions at home. The vacillation in carrying out reform measures has been accompanied by an unrest that has been detrimental to the schools. Three leading groups can be distinguished in the situation: (1) those states, parties, and organizations that are genuinely sincere in their intentions to have the provisions of the Constitution on "education and schools" carried out quickly and to the letter; (2) those that are overwhelmed by uncertainty and indecision; (3) and those that make no secret of their opposition to those constitutional provisions and that seek to misinterpret them and to prevent their realization.

EDUCATIONAL LEGISLATION

The federal government and education. — The idea of a federal system of education is dormant. Nothing has been done by the federal government to carry out the promises of the Constitution, so that the states are proceeding each in its own way and thereby increasing the diversification and absence of system in the German school. The German-nationalist Minister of the Interior, Schiele, while declaring himself in favor of greater unity and uniformity,

¹ This article continues the account of the educational situation in Germany given in the *Educational Yearbook, 1924*, pp. 277 ff.

took care to add that "the greatest danger that can threaten the country is centralization of education." Of his budget of 123,000,000 marks about 2,500,000 marks were devoted to general educational purposes, including 500,000 marks has scholarships for gifted pupils from the poorer classes.

Religious instruction and the schools. — Bavaria has seized the opportunity to utilize her autonomy in a very significant way. By seventy-three votes to fifty-two the diet approved a Concordat with the Vatican in January, by which all rights over the school that can be surrendered by a modern state have been granted to the Church. Professors and docents in the theological faculties can only be appointed if the Church raises no objection against them; in the philosophical faculties at least one professor in philosophy and one in history must have the approval of the Bishop. The supervision and direction of religious instruction in all schools is left to the Church. Similarly all subjects, and particularly history and nature study, are placed under the supervision and must have the approval of the clergy. The state trains and pays the teachers, and builds and maintains the schools; but the Church controls the spirit and instruction.

The Bavarian teachers struggled in vain to retain their constitutional rights, which provide that: "The giving of religious instruction is left to the option of the teachers. . . . Science and its teaching are free." By granting the same rights to the Protestant as to the Catholic Church the government cleverly won the support of Protestant orthodox groups and thereby a parliamentary majority. In spite of numerous objections on constitutional grounds, no action has been taken by the federal government, and a federal Concordat is greatly feared by some.

A preliminary to such a measure is seen in a new plan for a federal education law which has been the subject of heated

controversy since September. It is proposed to divide the schools along denominational and secular lines. A petition from forty persons directly concerned would suffice to secure a separate school. The provisions are such that the secular and community schools (*Gemeinschaftsschulen*) would be greatly restricted in their development. In the denominational schools all educational and instructional activity must be penetrated with the denominational spirit, which must be taken into account in the curriculum, the course of study, and the selection of teachers. There is a danger that the principle of the Bavarian Concordat will be extended to all the schools of the country and that the schools will be surrendered to the Church and be used for political purposes.

This measure has aroused a storm of protest. The communistic, social-democratic, and democratic parties are bitterly opposed, and even the German Popular Party has become conscious of its national liberal tradition. At a conference of representatives of educational authorities the measure was approved only by Bavaria and Mecklenburg-Schwerin and opposed by all the other states on cultural, educational, instructional, and financial grounds. The Conference of German Cities demanded that the separation of schools, if adopted, should be carried out at the expense of the federal government and that the valuable classification of schools into schools for gifted, normal, and subnormal pupils should be retained. Many city administrations, the University of Leipzig, the associations of secondary school teachers in Saxony and Thuringia, the *Bund entschiedener Schulreformer*, the Free Church Association, and many other organizations have protested in thousands of press articles and at hundreds of meetings.

All the objections are summarized in a memorandum of the German Teachers Association, which has 150,000 members :

This proposal is in sharp contradiction to the Constitution. Article 146 provides for the organic development of the public school system, accepts the community school as the normal type because of its unifying influence, and permits deviations from this type under certain conditions. The proposal on the other hand favors the denominational school very one-sidedly. The Constitution aims through the notion of "an ordered school organization" to prevent the development of obstacles in the way of the common school, the deterioration of the school system by the unrestricted establishment of incompetent schools, and any measure that may make the classification of the school system according to variety of abilities impossible. The proposal means the end of the state school. The historical development of a century, which made the state the responsible authority for its schools, is broken; the state surrenders important rights as the supreme authority in education to religious or secular organizations. The public school as a part of the educational organism of the country is uprooted, and becomes the pawn of special groups, of agitators, and of elections. The denominational school is completely handed over to the Church. . . . The proposal destroys the constitutional rights of teachers, who are subordinated in their professional and private lives to the religious authorities, and placed in constant danger of losing their positions. The guarantees that they enjoy under the disciplinary law of the state cease to exist for them and they are left without rights and without protection.

The friends of the proposal are the associations of Catholic or Protestant parents under the leadership of their clergy. They are afraid that the interdenominational school (*Simultanschule*) may be merely a transitional stage to the secular school, which was denounced at the Catholic Congress of 1925 as "the misbegotten child of complete unbelief!" Since the Center as the middle party in political coalitions is indispensable and is pursuing a well-considered and clever waiting policy, the proposal will some day become law. The school

will become a pawn in the hands of political parties, a condition to which it is all the more exposed because the Right and Left groups in Parliament are almost equally balanced.

The foundation school (*Grundschule*). — In the Federal Parliament ¹ the Foundation School Law (*Grundschulgesetz*) of 1920 was revised and now reads as follows :

The length of the course in the foundation school is four years. In exceptional cases able pupils on the recommendation of their teachers and with the approval of the educational authorities may be admitted to a middle or secondary school after three years of attendance.

The elementary school teachers, influenced strongly on social grounds, are opposed to making such exceptions; they wish to assure the child his right to a natural development. Many ambitious parents, ignorant of psychology, will in future artificially hasten the maturing process of their children in order to save a year. The development of the powers will be subordinated to cramming and memory drill. The external and spurious signs of ability can too readily become a factor in determining admission to the secondary school. The Left party is afraid moreover that the foundation school may again become the school for the poor and that the preparatory school (*Vorschule*) will be resurrected. Strong influences are already being brought to bear against the elimination of the preparatory school which should begin in 1926. Powerful conservative societies of parents are insisting on the complete freedom of those directly concerned in the schools and on the right to place their children in schools and under teachers that command their confidence; the state monopoly in the foundation school they regard as "an intolerable compulsion on all who have ability." Strangely enough democracy is demanded to-day

¹ There are in this body at the present time 42 schoolmen of all parties; in the Prussian Diet there are 50.

by those who least stood for it before 1918. Equally contradictory is the attitude of secondary school teachers, who are working energetically for the three-year foundation school but declare impossible any curtailment of the secondary school or even the promotion into it of able pupils.

The regulations of the education authorities of Prussia and Saxony are intended to limit the transfer to the secondary school to highly gifted pupils in exceptional instances and to base the decision on educational grounds.

A pupil cannot be regarded as exceptionally able merely because he is considered good in the foundation school or because he has been given special preparation at home or elsewhere so that he has a command of the knowledge of the age or class group beyond his own.

EDUCATIONAL FINANCE

There has been no change in the administrative relations between the state and local authorities. Complaints are heard that the state is attempting to increase its influence, particularly in the field of secondary education under the influence of those teachers who wish to be directly employed by the state. The Prussian Conference of Cities of 1925 drafted "Proposals for the Organization of the Legal Status of Municipal Secondary Schools"¹ in order to remove the great variety of views that prevail. Communities that pay for their schools desire to participate also with some influence in their internal affairs. The teachers concerned, however, are pressing for the continuance of the secondary school as a state institution.

The Federal Association of Cities complained at its meeting that the heavy and extraordinarily uneven distribution of the burden for elementary schools is almost overwhelming some communities. It was here suggested that the cost of salaries

¹ See *Deutsches Philologen-Blatt*, August 19, 1925.

be taken over by the state, which should pay for at least one teacher for every fifty pupils. Beyond this state aid should not mean any further limitation on local self-government.

In Prussia, since the share of federal income to the states has been diminished, the local communities have been compelled to make a higher contribution to the state school funds. Of the total state expenditures 19.64 per cent is devoted to public education. A special fund of about 17,000,000 marks has been set aside for grants in aid of buildings; this is loaned on good terms to local authorities, particularly in the hitherto neglected eastern part of the state.

By a law of July 22, 1925, Württemberg has adopted a new method for distributing the school burden. In the future communities with more than 50,000 population must bear 80 per cent of the cost of elementary school teachers' salaries, those with a population between 10,000 and 50,000 65 per cent of the cost, and those with less than 10,000 population 45 per cent; the share of the cost of salaries for teachers in secondary schools is fixed at 40 per cent in all cases. This means a considerable increase of the burden for the localities whose share during the inflation period, when the state paid in depreciated currency, was almost negligible. In many places the teacher is regarded as a local encumbrance, and the expenditure on the material side for the schools is kept as low as possible.

Frankfort-am-Main furnishes a good example of what progressive cities are doing :

SCHOOL	PER CAPITA COST TO CITY			STATE AID PER CAPITA
	1914	1924	1925	1925
Secondary (boys)	257 M.	277 M.	363 M.	15 M.
Secondary (girls)	163	285	353	15
Middle	65	185	234	59
Elementary	115	115	132	59

Since there are in Frankfort 33,000 pupils in the elementary schools and 15,000 in more advanced schools, the question is now raised whether correct methods of selection are being employed, and whether the high costs of education to the city are not due to the admission to the higher schools of too many pupils without either the necessary ability or without interest.

In Berlin 78,000,000 M. or 22 per cent of the total expenditure of the city were devoted to educational purposes. The reduction as compared with 1914, when the percentage was 30, is explained by the fact that the state has in the meantime taken over three fourths of the cost of salaries of elementary school teachers. In 1924 (January 1) the capital had the following schools and pupils :

	SCHOOLS	CLASSES	PUPILS	PUPILS PER CLASS	PER CENT OF TOTAL
Secondary . .	151	2,678	80,131	30	21
Middle . . .	31	425	14,583	34.3	3.8
Elementary . .	585	7,975	276,504	34.7	72.6
Special . . .	58	572	9,863	17.2	2.6
Total . . .	825	11,650	381,081	32.7	100

The per capita cost for a pupil in the secondary schools for boys was 310 M. ; for a pupil in a girls' secondary school 230 M. ; for a pupil in a *Realschule* 283 M. ; for a pupil in a middle school 162 M. ; and 114 M. for an elementary school pupil.

INSPECTION AND SUPERVISION

Serious charges were recently brought against the Prussian Minister of Education, a Democrat, that he was appointing too many members of the Left parties to responsible positions to the disadvantage of the schools. In his defense the Minister stated that, since the Revolution, Prussia had made

more progress in education than in fifty years of the conservative régime, and that the number of the Left party members represented in educational administration by no means corresponded to their strength in and outside of Parliament. Of 82 county and general inspectors only 6 and out of 531 district school inspectors about 60 were Social Democrats, a situation which must be corrected in future by giving greater consideration in appointments to the Left and Center parties ; " justice must be done."

Saxony is planning to increase the number of inspectors, a proposal supported by the teachers, since 37 inspectors for 15,000 teachers are inadequate. The Ministry intended to appoint assistants to the inspectors, but failed to carry the measure in the Diet, since the majority sees in it a movement to revive the old authoritative system and refuses to curtail the self-government granted to the teachers.

In Bavaria a comprehensive task has been imposed on the district school inspectors by placing the annual examinations of elementary and continuation schools, which have recently been restored, under their direction. The examinations are intended to test the achievements of the pupils on the one hand, and on the other to give the inspectors an insight into the general methods and standing of the school. Definite regulations on the subject have been issued by the Ministry.

PRESCHOOL AND KINDERGARTEN EDUCATION

The demand for kindergarten teachers exceeds the supply, but will probably be met soon by the influx of young women into the training institutions, owing to the reduced opportunities in the commercial occupations. The professional training is to-day being supplemented by preparation in the domestic science subjects and activities. Since the beginning of this year Prussia requires candidates for admis-

sion to the training institutions to pass an examination in cooking, washing, and ironing. Because of this emphasis training for kindergarten work is popular with parents who feel that such training has permanent value even for those who do not continue in the profession.

Now that the financial pressure does not bear so hard on the local communities as in the time of daily depreciation of money, greater attention is being given to the development of kindergartens. In many places they assume the cost of the salaries, while the material needs are met by philanthropic organizations.

In June, 1927, the seventy-fifth anniversary of the death of Froebel, many teachers, native and foreign, will make a pilgrimage to Bad Liebenstein in Thuringia for the dedication of the Friedrich Froebel House, which with its kindergarten, playground, children's center, and convalescent home will show concretely what the great educator tried to achieve.

ELEMENTARY EDUCATION

A new school attendance law has been passed in Thuringia requiring the completion of eight years of elementary and three years of vocational education. No tuition is charged, in accordance with the provisions of the Constitution, and school books are loaned free to necessitous pupils at the request of their parents. Serious violations of the attendance law are to be punished by a fine up to 30 M. Exemptions are granted only to children with such mental or physical handicaps that they could not be educated; feeble-minded children are sent to special schools, and delinquent children are also provided for in protectories.

A new system of classification has been adopted in Hamburg. The eighth to the tenth years of the elementary school, of which the last two years are optional, are grouped

together as an "upper division" for such pupils as show on the completion of the seventh year aptitude and ability for further progress in German, English, and mathematics. It is intended that they should be of a type that can be prepared for intermediate positions in large industrial and commercial concerns. A similar plan has been adopted in Saxony. The middle and *Real* schools feel themselves threatened, and their representatives are attacking the new "upper divisions"; the elementary school teachers, on the other hand, feel it an obligation to win the parents over to their views. An objective verdict on the educative possibilities of the new school can only be reached by experimentation.

The conflicts around the school of activity (*Arbeitsschule*) have quieted down somewhat. (See the article, p. 501, on *The Problem of the Elementary Curriculum in Germany*.) A few experimental schools have been closed by the authorities, or their aims have been approximated more to those of the ordinary schools, while full freedom has been left in methods. The so-called "life and community schools" (*Lebens- und Gemeinschaftsschulen*) have attempted to define their problems at a conference. The attitude of questioning everything that has been handed down by tradition has moderated. Undoubtedly the innovators contributed much in a creative way, but they no longer insist on absolute freedom, since they recognize that while the child has certain rights, the claims of subject matter cannot be ignored. The doctrinaire supremacy of the catchword, "Start with the child," has been shattered; as a formula it has had to compromise with facts. The Left and Right wings in education are gradually becoming reconciled, understand and appreciate each other, and are united in winning the public for the golden mean. Such compromises on the basis of the realities of the situation are very promising for the future.

MIDDLE SCHOOLS

New regulations have been issued for the middle schools of Prussia, of which there are nearly 400. Their position in the school system is carefully defined :

The progress of the arts and crafts, of industry and commerce, of agriculture and forestry demand a higher preparation from the boys and girls entering these vocations. At the same time there is developing a demand for more appropriate preparation for intermediate positions in the state and local civil services and in the larger industrial and commercial concerns. These demands can be met only to a small extent by the elementary school, in spite of its varied organization, on account of the great difficulties under which it labors as a compulsory school. In the secondary school the aims are directed to academic purposes primarily, so that they too are unable to meet the needs under discussion. Hence the need of a school intermediate between the elementary and the secondary school. . . . The smaller classes, more generous supply of equipment, and more favorable home conditions will add to the real effectiveness of the extended period of education.

In future every middle school will be based on the foundation school and will have a course of six years. The entrance requirements are the same as for the secondary schools. Tuition fees are charged but free places are granted to needy pupils who show diligence and ability. Boys and girls are taught separately except where the numbers do not warrant separate classes. For the academic work only teachers who hold the special certificate for middle schools or have passed the examination for secondary school teachers may be employed. In the girls' schools the majority of the teachers must be women.

The study of a foreign language is obligatory from the first year, and a second optional from the third year of the course. Household arts for girls and manual work for boys are included

in all the programs, as well as gardening for both boys and girls; these subjects are, however, not obligatory, which applies equally to stenography and typewriting. The number of hours per week in each class is as follows: 32, 32, 34, 34, 36, 36.

The distribution of subjects and hours is left flexible by the Ministry, so that more intensive work can be done when necessary in fields that are of special importance for the future vocation. Five plans are available — a general plan for boys, a plan for boys with special reference to their future vocation, a general plan for girls, a plan for girls with special reference to their future vocations, a plan for such middle schools as give special preparation for those who wish later to transfer to a secondary school. The courses of study contain detailed instructions and suggestions for each subject, and are inspired by the demands of modern pedagogy in so far as they take a stand against one-sided intellectual training and cramming of mere information. It is now proposed in many places to add a seventh year to the course for girls to train them in the duties of housewife and mother or to prepare them to be nurses, kindergartners, social workers, etc.

Secondary school teachers are not friendly to this reform. They are afraid of a complete identification of the middle with the secondary school so that the lower and middle sections of the latter will be exterminated by the development of the middle school. They are of the opinion that only university-trained teachers should be allowed to give work that leads to the proposed "intermediate certificate" (*Zeugnis der mittleren Reife*). This certificate affects the very existence of the middle schools; for, if the government decides to require from its officials the standard required for admission to the last year of a secondary school, then the development of the middle schools is seriously menaced, since it lacks a year of this requirement.

SECONDARY EDUCATION

The two new types of schools, the *Deutsche Oberschule* and the *Aufbauschule*, are developing satisfactorily. Bavaria alone is opposed to them and the humanistic Gymnasium continues its undiminished sway. The *Aufbauschulen* in Prussia are attended by 6000 pupils. It is possible that they will find their way into the large towns, in spite of the opposition of the secondary-school teachers who see in the new course of seven years of elementary and six years of secondary education a menace to the nine-year institution.

Although the Federal Education Commission after wearisome discussions decided against it, Hamburg has been experimenting with an eight-year secondary course. Should Hamburg persist in this experiment, the first graduates in 1928 will find access to most German universities closed to them. The authorities will not admit this danger, while the reports of the secondary-school teachers are not at all favorable to the experiment.

Secondary schools for girls (*Lyzeen* and *Oberlyzeen*) show an increasing enrollment. Parents are more and more recognizing the value of a well-rounded course. Identification with boys' secondary schools is growing stronger, although the opinion is heard that a higher institution of the middle-school type, giving much practical preparation for the duties of wife and mother, is enough for girls; the small number who look to academic careers could be admitted to the boys' schools. The view expressed in such quarters that German culture has nothing to expect in the way of enrichment from academically trained women is strenuously opposed by the supporters of women's rights.

The *Suggestions for Courses of Study in the Prussian Secondary Schools* (*Richtlinien für die Lehrpläne der höheren Schulen Preussens*), which followed the Memorandum of

Councilor Richert of 1924 and received the approval of the whole Cabinet in April, 1925, have served as a center for the liveliest discussions. For the first time in the educational history of Prussia uniform principles are set up for all secondary schools for boys and girls. In the first part (principles and methods) are traced the main lines of internal reform; the second part deals in detail with the objectives of each subject. Valuable ideas are presented on a number of topics like the following: electives within the scope of the *Suggestions*; activity instruction;¹ concentration of subjects in contrast to the closed compartments hitherto in existence; environmental instruction; national, civic, and art education; the study of educational philosophy; and the application of adolescent psychology in instruction. Connected with this is the revision of the regulations on homework, written class exercises, and the free working groups (*Arbeitsgemeinschaften*), with special attention to the groups devoting themselves to philosophy. It was originally intended to include philosophy as an obligatory subject, but the Ministry decided in favor of voluntary working groups, owing to the opposition of the Catholic Bishops, who feared that pupils might read the works of philosophers placed on the *Index* or insisted that the subject should be taught by the teachers of religion.

The *Suggestions* have not escaped criticism. It is objected that standards have been lowered in the humanistic Gymnasium, that an excessive amount of work has been imposed on teachers and students, that the maximum courses of study, from which each school is to make its own selections, will lead to the worship of subject matter. Scarcely a

¹ The congress of *Deutsche Landerziehungsheime*, held in Berlin in May, 1925, was rich in suggestions for the internal reorganization of the activity principle. These institutions, although differing in organization and purposes, have formed themselves into an association, which should serve as a source of progressive movements perhaps because of these differences.

single subject-matter representative is satisfied; one complains that too much has been taken from him, another that he has not been given enough. The distributions of the chief subjects under the old and new plans are indicated in the following percentages:

	GERMAN HISTORY GEOGRAPHY		LATIN GREEK		FRENCH ENGLISH		MATHEMATICS NATURAL SCIENCES	
	Old	New	Old	New	Old	New	Old	New
Gymnasium . . .	23	29	45	41	9	7	23	23 per cent
Realgymnasium . .	25	30	22	19	21	22	32	29
Reformreal- gymnasium . .	26	33	18	8	25	31	31	28
Oberrealschule . .	30	34	—	—	33	29	37	37
Deutsche Oberschule	41	41	—	—	27	28	32	31

It is the wish of the Ministry that the task of reform that has been begun should not be disturbed by severe criticism, but should be allowed to be tried out without interference. Proposals are being collected for the reform of the leaving examination (*Reifeprüfung*). The intention is to give the student more opportunity to prove himself in his own particular fields. For example, four topics might be offered for selection for the German essay; the essay in a foreign language might be dropped, and an oral examination might be introduced in a subject selected by the candidate. The marks should be given on the basis of a thorough consideration of the candidate's ability instead of, as hitherto, on the basis of a uniform numerical marking system.

There has been no change in the matter of tuition fees. In Hamburg there are at present 30 per cent free places, while 40 per cent of the pupils are admitted on reduced fees, depending on the size and income of the family. Thuringia has also adopted a scale of fees depending on income, be-

ginning with 120 M. in the lower and middle divisions and 160 M. in the upper divisions, where the income of parents exceeds 6000 M. a year ; free tuition is given, if warranted by ability and industry, to pupils whose parents earn less than 1800 M. a year. The scholarship system has been organized on model lines in Leipzig, so that every able child in the lower and poorer middle classes is provided with educational opportunities.

VOCATIONAL EDUCATION

The enactment of a federal law for the vocational training of young persons between the ages of fourteen and eighteen, which was planned for in the Constitution, is finally within sight. It will provide for the closest relations between the day continuation school and economic life, and will provide a system of privileges by which the vocational schools will be fully incorporated in the general educational organization and in the life of the country. It will further provide that no employer shall make any reduction from the wages of a young employee who is compelled to attend school during working hours. It is expected that the law will introduce some supervision of the general working conditions of young persons with reference to health, vocation, and education, and will secure longer holidays, which are demanded in the interest of health. The problem was discussed at Cassel in 1925 at a conference on Leisure for the Young, at which special attention was given to the often repeated objection that the vocational schools aim primarily to meet the vocational needs of their students, but give too little attention to the problems of the adolescent period or its needs. Because of the importance of this period for later development the vocational schools must in future exert their influence on psychological and educational lines.

A new law for the reorganization of the vocational-school

system has been issued in Thuringia. At least eight hours a week (320 hours a year) must be given to industrial, commercial, or household-arts instruction. Rural schools are to be attended for only 120 hours during the winter season, although there are also schools giving instruction for 240 hours throughout the year and intended for the sons and daughters of farmers. In Bavaria the wishes of the agricultural population are more definitely met by placing continuation instruction on Sundays; the government in this way is meeting the views of the farmers that "the imposition of further education on the agricultural population should be removed without delay."

In the larger Catholic centers religious instruction, which the government refused to make compulsory, has been introduced as an optional subject by the local authorities which bear the cost. Many cities are being urged by their teachers to establish auxiliary schools for illiterate workmen, a progressive proposal that cannot be long postponed. More adequate support is, however, required from the state; Prussia in 1925 appropriated 5.50 M. for each student in a vocational school and only pays one twelfth of the cost of salaries for teachers in schools of industry, commerce, and household arts.

In the field of secondary education there is a demand among those interested for an economic secondary school (*Wirtschafts-Oberschule*, *Werk-Oberschule*, *Technisches Gymnasium*), which shall concentrate on man in the economic life of society and civilization and develop his artistic and creative abilities. It is proposed that the course should begin with *Obersekunda* and be open to pupils from other secondary schools who would find in the new school specialized training to meet either their special capacities and inclinations or the needs of their future vocations.¹

¹ See the memorandum and proposed courses of study in *Zeitschrift für berufliches Schulwesen*, No. 4, 1925.

TEACHERS

Preparation of elementary school teachers. — To Saxony and Thuringia, which give a three-year preparation in the universities to their elementary school teachers, must now be added Hamburg and Hesse. Numerous meetings have been held by those interested in the preparation of teachers to discuss such details as time schedules, the possible types of practical training, the place of the elective academic subject, training in manual activities and art, etc. The examination regulations issued in Saxony in the middle of 1925 have clearly defined the new system. In this state also the best provisions have been made for student self-support, lodgings, and assistance through the help of the teachers' associations. Without such provisions a dearth of candidates would be feared.

Bavaria, Baden, and Württemberg are still hesitant, chiefly for financial reasons; Mecklenburg-Schwerin is ignoring the definite constitutional provisions and retains the special normal schools, based on five years of elementary education and followed by two years of practical training in a pedagogical institute.

Prussia is pursuing a middle course. The following general principles are laid down in a Ministerial memorandum: Future elementary school teachers will receive their general education in a nine-year secondary school and their professional preparation in two-year denominational pedagogical academies, which are better able to give the practical and intellectual training than the existing universities. These academies will be centers for the study of the history and theory of education; they must give their students a mastery of those educative subjects that have a place in the elementary schools; they should become centers for the regional study of nature and culture and of local institutions

and customs; they should prepare teachers ready and willing to serve their communities. The memorandum contains all the necessary details on the course of study, time schedules, teaching staff, and administration, practice school, etc. The first three institutions will be opened as experiments at Easter, 1926, with 50 students each. It is expected that in future 35 pedagogical academies, each with 250 students, will be required to meet the demand for teachers. At present there is no need for haste since about 27,000 young teachers are still unemployed.¹

The teaching profession is opposed to the establishment of the pedagogical academies on a denominational basis. It is also anxious that the academies should be located in university centers, so that the equipment and faculties of the universities might be available for the preparation of teachers. Another objection is that the teacher-candidate is not permitted to matriculate in a university at the same time and to study for the doctorate, with the result that the cleavage between the lower and higher teaching professions is perpetuated. In answer to this criticism it is maintained that unity between the two branches is impossible, because the academic teacher and the public school teacher are different in every way. The memorandum emphasizes the point that the aim is not to produce a finished teacher, but one capable of further development and growth.

Preparation of secondary school teachers. — The faculty of philosophy of Berlin has issued a memorandum on the preparation of secondary-school teachers which begins with the definite rejection of an exclusively pedagogical emphasis in the training, but admits the existence of a marked differ-

¹ To meet the economic wants of these teachers the Federal Government has appropriated 6,000,000 M. and Prussia 5,000,000 M. If Prussia were to reduce the 1200 classes with more than 60 pupils and the 39,000 classes with more than 50 pupils to the maximum of 35, which is established in Saxony, the majority of the unemployed teachers could find positions.

ence in the content of subjects in the university and in the secondary schools, so that what is studied in the universities often fails to meet the needs of the schools. To remedy this situation it is proposed to graduate the courses for beginners and advanced students; some of the courses will introduce the students to the materials and methods that the future teacher will have to use; in others the history of the subject will be treated so that the students may appreciate thoroughly their inner meaning and present status. Suggestions are made to improve the relations between instructors and students. The study of education in its practical aspects is still kept out of the universities, although the number of courses on education, child psychology, philosophy of education, and so on is increasing. It is suggested that in the vacations students may visit classes in which their own special subjects are taught and give lessons in order to prove and test their aptitude for the profession.

EDUCATIONAL TESTS AND MEASUREMENTS

Psychological methods are proving increasingly helpful in the selection of pupils for the secondary schools. Intelligence tests are employed to supplement the traditionally uniform information examinations. The generally accepted definition of Wilhelm Stern is used as a basis: "Intelligence is the general ability of the individual to do his own thinking to meet new situations; intelligence is the general mental ability to adapt oneself to new tasks and conditions of life."

Hamburg has introduced experimental classes in which candidates for selection are taught together for some two weeks. The tests are employed in the form of oral and written tasks, which can hardly be distinguished from other types of instruction.

The spread of psychological methods is restricted by the poor preparation of teachers. Bobertag and Hylla in Berlin have for this reason systematized the tests, the methods of marking, and the calculations in such a way that teachers can use them without any special training. They are of the opinion that only methods of the greatest simplicity and requiring the least expenditure of time can remove the prevailing indifference of teachers. The University of Hamburg, which is now studying racial differences (*e.g.*, Jewish children) and the psychology of the rural child, prefers the plan of using a selected number of teachers as school psychologists. The probability is that the teaching body will reject full-time officials of this kind, who will, however, gradually find their way into the schools much in the same way as school doctors, once unwelcome but now indispensable, did.

MEDICAL AND SOCIAL WELFARE

The school doctor, concerned originally with the hygiene of school buildings and equipment, is becoming more and more a school medical officer and guardian of the pupils. In 1911 Prussia had 1200 school doctors and 2528 in 1924, 172 of the latter being full-time officials. During the past year local communities in Thuringia have been compelled to make provision for the medical care of all school children; in Leipzig a model regulation on school hygiene has been adopted. School dentists and school nurses, whose work is to see that measures recommended by the doctor are carried out, are coöperating to a greater extent with the teachers. In many places special efforts are devoted to instruction concerning tuberculosis and to goitre prophylaxis.

Appreciation of light, air, and movement is gradually making inroads into older conceptions and bad habits. Parents are slowly learning that the idea of instruction is not in-

evitably bound up with sitting. Particular attention is being given to the physical education of girls, and the victorious march of education for personality, community life, love of nature and beauty is not likely to be checked by fears that womanly modesty and morals will be endangered. President Hindenburg has announced that "the pursuit of athletics is a civic duty." An attempt was recently made in the Reichstag to require one hour of physical exercise every day, but did not meet with success, although it has already been tried in some city schools. The German National Committee for Physical Exercise (*Deutsche Reichsausschuss für Leibesübungen*) has devised a badge which is given to every boy or girl who fulfills certain athletic requirements. Suggestions are made in many places to introduce compulsory gymnastics and athletics as a substitute for the physical advantages that used to come from military service. The Left parties are afraid that out of this there might develop a compulsory year of work and a kind of militarization of young workers.

The German University Conference demanded the adoption by the state of measures to insure adequate physical training for the whole body of students. The University of Jena has made a beginning by making admission to academic examinations dependent on proof of participation of one hour a week in physical exercises; the choice of activity is left free to the student.

The country-home movement is spreading widely. Elementary and secondary schools, particularly in Hamburg and Frankfort, through public or private means acquire a home in the mountains or by the sea. Hither classes go with their teachers for several weeks, gain in health, live close to nature, and cultivate social virtues, the teachers living with their pupils as friends.

Malnutrition has not yet been conquered in spite of the

stabilization of the currency. The American-German Children's Relief Work was taken over in October, 1924, by many communities at their own expense. An examination undertaken along lines suggested by the advisory medical board of the *Deutscher Zentralausschuss für Auslandshilfe*, undertaken late in 1924, showed that of 1,424,000 children 20 per cent were urgently in need of food, and 8 per cent were affected with tuberculosis. Complete and detailed tables of height and weight are given in the *Allgemeine Deutsche Lehrerzeitung*, 1925, p. 619.

In Prussia some 2,000,000 children who left school came under the control of the youth movement in 1924 as compared with 1,200,000 in 1913. The state makes grants in accordance with the efforts of the localities and associations for gymnasiums, playgrounds and athletic fields, baths, homes, hostels, libraries, and advisory bureaus for adolescents. Sufficient attention has not yet been given to the needs of young women or to the rural districts. Since the inflation period brought serious dangers from neglect, since the wage-earning opportunities of school children and adolescents are increasing alarmingly, and since the economic and educational needs of many families are still enormous, there is an overabundance of work for organizations that have to do with youth.

UNIVERSITY EDUCATION

The status of education as a university subject shows the greatest variety and diversity, reflecting the appreciation in which it is held in each case. In the universities of Berlin, Bonn, Breslau, Erlangen, Freiburg, Giessen, Heidelberg, Kiel, Marburg, Münster, and Rostock it still forms a part of philosophy. In the universities of Frankfort, Göttingen, Greifswald, Halle, Jena, Cologne, Königsberg, Tübingen, Munich, Würzburg, Leipzig, and Hamburg, and in the

technical high schools of Bremen and Dresden it is ranked as an independent subject. There is still some controversy in many places on the status of psychology. It is an independent subject in Bonn, Frankfort, Giessen, Göttingen, Halle, Heidelberg, Jena, Cologne, Königsberg, Rostock, Würzburg, and Hamburg. The other universities look upon psychology as a branch of philosophy or incorporate it with education.

Of 31 universities 19 have educational seminars for practical work and scientific research; 28 have psychological institutes; 18 have both the educational seminars and psychological institutes. There is no doubt that the gulf between philosophy and education is being widened and the acceptance of the science of education as an independent subject is in sight.

CURRENT PROBLEMS

To the problems that have already been discussed must be added others such as vocational guidance, adult education (people's university, special group schools, popular libraries, popular theater, moving picture, etc.), coeducation, sex education, school campaigns against intoxicants, and training for citizenship. How the last of the subjects mentioned can be taught from a genuinely living point of view instead of as dry information material is the center of much thought at present. The social participation of the youth of the country, which in itself is to be welcomed, is often directed into devious channels; political parties, especially those at the extremes, seek to have dealings with them. According to a decree of the Prussian Minister the activity of school pupils in party politics has had regrettable consequences. The duty is emphasized of co-operating with parents in devising measures to free the schools from politics; particularly are pupils who annoy

others on account of their views to be severely punished. In general the wearing of badges, colors, and other symbols of every kind is forbidden in the schools. Every act of disrespect to the federal colors is to be treated as a serious misdemeanor. While banishing nationalistic, monarchistic, or anti-Semitic agitation from the schools, the decree makes the curious provision that the colors of the Republic must not be carried publicly in the school.

This is but a small, yet significant indication that the young German Republic is not thus far firmly established. But it has been recognized that the hope of the people lies in its young. Hence the efforts to give the young an education that emphasizes responsibility for the German nation and trains for ready and competent service and conscious participation in the restoration of the country.

STATISTICS

The statistics that are given in this section supplement the figures that appeared in the *Educational Yearbook, 1924*, pp. 322 ff. General statistics for the whole of Germany will not be published until 1926, the end of a quinquennium.

Auxiliary schools (*Hilfsschulen*). — Statistics for these schools for all types of subnormal pupils were collected at the beginning of 1925 by the *Verband der Hilfsschulen Deutschlands*. In 600 localities there were about 875 auxiliary schools with 2800 classes and 80,000 children employing some 4000 teachers. The number of schools was doubled between 1919 and 1924.

Secondary schools in Prussia. — The figures that follow do not include private secondary schools, the 6 state institutions of secondary grade, 16 agricultural schools, and 73 *Aufbauschulen* recently established on the basis of the old normal schools. The statistics are for 1924, when the population of Prussia was about 38,000,000 :

SCHOOLS FOR BOYS		SCHOOLS FOR GIRLS	
Gymnasien	316	Lyzeen	292
Progymnasien	15	Oberlyzeen	70
Realgymnasien	252	Frauenschulen	53
Oberrealschulen	134	Studienanstalten	65
Realschulen	189	Deutsche Oberschulen	6
Deutsche Oberschulen	4	Aufbauschulen	6
Aufbauschulen	6		
Total	916		492
Classes	9,822		4,329
Students	300,000		130,211
Principals	683		270
Teachers	8,703		2,123
Vacant positions	1,215		392
Assistants	2,137		667

In the boys' schools 3975 girls were enrolled, and in the girls' schools there were 188 boys. Five women taught in the schools for boys, while in the girls' schools there were 243 male principals and 1131 male teachers of all grades. The number of women is, however, growing every year.

Universities. — The distribution of the students by special fields pursued in 23 universities was as follows in the winter semester, 1924-25 :

FAMILIES	MEN	WOMEN
Theology, Protestant	1,784	49
Theology, Catholic	1,579	2
Law and political science	17,104	581
Political economy	6,085	672
Medicine	7,196	1,312
Dentistry	708	174
Philological-historical sciences	10,330	2,903
Mathematics and natural sciences	2,557	440
Chemistry	2,129	165
Pharmacy	1,052	210
Agriculture	2,637	38
Other subjects	1,043	128
Total	54,204	6,674

In addition courses were attended by the following non-matriculated students: 10421 men and 1949 women. The teaching staff included 1878 full professors, 1228 associate professors, 283 honorary professors, 963 private docents, 170 lecturers, 79 assistants, and 95 technical assistants, a total of 4636, of whom 279 were relieved from official duties.

The distribution of students in the technical high schools was as follows:

FIELD	MEN	WOMEN
Architecture	1,446	27
Civil engineering	2,070	4
Mechanical engineering	9,080	9
Electrotechnics	3,552	4
Chemistry	2,659	103
Pharmacy	168	19
Metallurgy	635	2
Mining	644	—
General courses	1,959	143
Total	22,213	311

There were in addition 2371 men and 1217 women auditors. The faculties included 439 full professors, 169 associate professors, 69 honorary professors, 232 private docents, 709 assistants, a total of 1618.

Among other higher institutions there were 2 veterinary schools, 4 agricultural schools, 3 forestry schools, 5 commercial schools, 2 mining schools, 14 art schools, 11 schools for music, and several other academies of university rank.

The vocational preferences of a majority of the 26,526 men and 3475 women students in the Prussian universities in the Winter semester of 1924-25 are shown in the accompanying table:

PROFESSION	MEN	WOMEN
Judge	769	2
Lawyer	543	12
Teacher	1,905	1,027
Public services	2,139	37
Commerce	17,024	89

The majority of the students came from families in which the father was a government official, engaged in business or in the liberal professions; only 367 men and 9 women stated that their fathers were working men.

The number of foreign students attending Prussian universities was 2069 men and 261 women; of these 716 men and 103 women spoke German as their vernacular. The following countries were represented in this group: Russia, Poland, Czechoslovakia, Bulgaria, Roumania, Austria, Norway, and China.

Cost of education. — The following figures are available for the expenditures for education in Prussia as provided for in the budget for 1925. The figures for 1914 are presented for purposes of comparison:

	1914	1925
Ministry and general administration	1,804,630 M.	4,419,500 M.
Universities	25,106,643	42,431,000
Technical education	8,180,193	10,144,200
Other scientific institutions }	13,993,771	4,852,300
Art }		6,929,300
Provincial boards and examination boards	2,044,402	1,963,300
Secondary education	24,743,807	28,084,600
Physical education }	185,967,191	489,200
Elementary education }		369,438,200
Ecclesiastical affairs	41,094,270	60,448,600
Total	302,934,907 M.	529,200,200 M.

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HOLLAND

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INTRODUCTION

In his introduction to the *Educational Yearbook* of 1924, Dr. I. L. Kandel says: "Educational systems represent the considered formulation of a country's ideals, affected as they are by its history and present needs, and of its hopes for the future." This happy definition of a difficult idea holds true for the rather intricate system of Dutch education. Like other organisms it is constantly changing, owing to influences springing partly from its own native soil, partly from abroad; nevertheless it has retained characteristic features by which it shows its peculiar Dutch nature. Accordingly some historical reference is necessary in order to understand present-day conditions. The above quotation is illustrated in the lines of the famous Dutch Poet William Bilderdijk who wrote:

In het verleden ligt het heden,
In het nu, wat worden zal.

(In the past is the present, in the present is the future.)

A second important factor, closely connected with the historical and, indeed, forming a fundamental part of it, consists in the national characteristics of a people, especially if such a people has had a long period of independent civilization of its own.

The Dutch have always been an argumentative nation, proud of their liberty, fond of dogmas (especially when they are of a religious nature), slow to action, but tenacious.

From the birth of our nation, about the sixteenth century, until the present our people have discussed religion and politics with great zeal. Individualism was and is still a mighty feature of our national life. Open to any suggestion from outside, the Dutch like to go their own way, slow but steady. A typical Dutch proverb is: "de kat uit den boom zien" (to see the cat out of the tree). Anyone trying this experiment must be prepared for a long and tedious watch. To the students of Dutch educational conditions all these national tendencies will present themselves in due time; any survey of present Dutch education must make allowance for them.

Struggle for the schools.—Until 1800 we can hardly speak of a Dutch educational system. Schools were scarce and few, badly equipped, and for the greater part private undertakings without any public support or control. At the beginning of the nineteenth century under the influence of the French Revolution a sort of public school system was introduced and schools were established, open to all denominations but supported by the state. Those dissatisfied with the teaching in the public schools and desirous of sectarian, religious education for their children were allowed to found and support schools, but out of their own pockets. These sectarian schools were curiously named *free schools* (*i.e. private schools* and quite the reverse of the American free schools). In the latter half of the nineteenth century a movement began in favor of the "free" schools. The strict Calvinists and the Roman Catholics demanded equality of rights for their schools. They propagated the idea that it was unjust to pay taxes for the support of the public schools, to which they objected on religious grounds, and at the same time to maintain schools of their own. The idea that the public schools as the symbol of the nation's unity should educate all the children was rejected. The state should pay for the free as well as for the public schools.

This controversy was one of the most crucial questions in Dutch politics. On the one side the so-called Right parties (Calvinists and Roman Catholics) advocated the claims of their own schools; on the other side were the Left parties (Liberals and, later, Socialists) who opposed the demands of the Right parties. For a long time the Liberals had a parliamentary majority and thus the struggle went on for a long time. There were many who deplored this state of affairs and aimed at a settlement. Eminent scholars and politicians of both sides proposed a plan which should end this fight of long standing and be beneficial to the development of education in general. In 1918 when the Right parties were in power a compromise was effected. One of the first results was a new Elementary Education Act, the work of the first Minister of Education, Dr. J. Th. de Visser. Other Acts followed concerning secondary education, and in a short time equality of rights was an accomplished fact. The Dutch nation was, generally speaking, relieved that the struggle for the schools was over.

Features of the new Education Act. — The new Education Act, founded on the principle of equal right to support from the state for public as well as for nonpublic schools, introduced several other important changes in the elementary school. The principles are the lowering of the number of pupils per teacher, the abolition of foreign-language teaching in the elementary school, and the organization of a modified form of common school (*eenheidsschool*).

In the years 1920 and 1921 Holland enjoyed prosperity for a short duration owing to the post-War conditions. Money was plentiful, the standard of living rose, the salaries of all officials were improved, the teachers for the first time in Dutch educational history received a salary which, although moderate, was considered to be sufficient. The number of schools increased out of all proportion; the de-

plorable division of our nation into numerous denominations caused every sect to desire a school for its own children. This unavoidable consequence of the new Act was fatal to the organization of education. In some villages where a single public school, well staffed and properly equipped, formerly taught all the young of the place, three or four small schools were established, so that, instead of one competent school, several incompetent schools were found. All this was disastrous both to education and to finance. The system of giving every denomination its due is at all events a very expensive one. There are not a few who deplore this state of affairs, but it will be difficult to change it; the trend of our politics is certainly in favor of the nonpublic, sectarian school. On the whole the public school is losing ground; there is a strong movement to make all elementary schools nonpublic, the state only to furnish the necessary money for this support without interfering with the teaching.

When, after the short years of unparalleled prosperity, a reaction set in, the cry for economy was raised. The first to suffer were the teachers whose salaries were drastically reduced, while the number of pupils per teacher was raised. But it is clear that the fundamental principle of the Education Act, being a political compromise, cannot be changed.

The abolition of foreign language instruction (mostly French) from the curriculum of the elementary schools is closely connected with the introduction of the common-school idea. It is well known that the latter is a pedagogical as well as a political problem. In the democratic post-War days when the cry of opportunities for the gifted was heard in educational Western Europe, progressive politicians and teachers propagated the ideal of one school for all with much fervor. Theoretically speaking, the American public schools, where the children of all social classes sit side by side, is very

attractive. But in the countries where class distinctions have not disappeared and where home education influences the children's progress at school so strongly (and this is the case in Holland) the strictly orthodox common school is an impossibility. Nevertheless the days when the schools for the "lower classes" were unblushingly called pauper schools have gone, with no one to regret them.

Formerly the school children used to be classified according to the fees paid. In some towns, such as Amsterdam, not less than four kinds of schools were found. The curricula differed, too; in the schools for the "better classes" French was taught, while the other branches were of a more extensive character. As only children with some knowledge of French were admissible to the secondary schools, it will be clear that the simple fact of the amount of the school fee decided a child's further education. Secondary education was only for the "select few."

The Act of 1920 altered this for the public schools, the nonpublic, strange to say, being left free to do as they liked. A kind of elastic common school was introduced and French disappeared from the curriculum of the elementary school. These measures led and are still leading to confusion. The Dutch do not like the common school and are inclined to send their children to the nonpublic schools where class distinctions are still marked. But the teaching of French is the real bone of contention. The Dutch have by necessity to learn two or three languages besides their own. Our position among powerful nations — Germany, England, France — requires this knowledge. Our commerce, industry, and science, depend upon our acquaintance with foreign tongues. We attach great worth to the intensive study of German, English, and French. Our secondary and our higher elementary schools include these languages in their curricula; our gymnasias and lycea add Latin and Greek to them. Owing

to tradition French was for a long time considered to be the most important language and thus was the first foreign language taught. Moreover, it was considered to be the most difficult as its construction and idiom differ entirely from Dutch, which is a Teutonic language.

When French was part of the curriculum of the elementary schools, some knowledge of it was required for entering the secondary schools. The disappearance of it from the elementary teaching compels the secondary schools to start with two languages in the first year, viz., French and German, English being generally taught in the second year. There are many who doubt the wisdom of this. The years from ten to twelve are considered by many to be the most fruitful for memorizing words and phrases and other easy mechanisms of a foreign language. Now that the new Education Act forbids any foreign-language teaching in the elementary schools, many parents support courses where their children learn French in out-of-school hours. Thus confusion has set in and secondary schools receive pupils with and without some knowledge of French. The task of the French master is now extremely difficult, having to deal with pupils of various degrees of attainment. In some cases teachers have tried to "Daltonize" in order to overcome these difficulties. Dr. K. J. Riemens describes in *Paedagogische Studien* an experiment which will be interesting to all concerned in language teaching.

A way out of these difficulties is almost impossible. A return to former conditions at once destroys the common school, unless one is prepared to go the length of teaching French to all children in elementary schools. Yet something must be done as public opinion is strongly in favor of including a foreign language in the elementary-school curriculum. A member of Parliament, Miss J. Westerman, formerly headmistress of a school in Amsterdam, introduced a bill in

1925 to make it possible to introduce foreign-language teaching. The bill was rejected, but there are indications that this will not be the end of the affair. Before long our government will have to solve this knotty problem which we may safely call one of our educational perplexities.

ADMINISTRATION OF EDUCATION

Central administration. — As will be clear from the foregoing, we cannot speak of a rigid educational system in Holland. The state pays for the schools whether they are public or sectarian, provided they come up to certain requirements as to curriculum and buildings. This holds good for elementary as well as for secondary teaching, except that some of the latter are state schools, directed by the Ministry of Education. Thus Dutch education is for the greater part decentralized, in conformity with our national trait of individualism. The central authority, the Ministry of Education, only draws up some general lines and leaves most details to the town councils and school boards which may be considered as the local authorities. As the Ministry of Education is an administrative and not an educational organ, it is only concerned with administrative details. We have no Bureau of Education and no official publications except for the annual reports, which are mostly statistical.

Local administration. — The town councils and the school boards take care of the educational details, such as the approval of textbooks, the length and the number of the school days, the holidays, the extent of the curricula, etc. Some big towns employ special inspectors in order to assist the town council in their educational work.

As stated above the state pays all expenses; if, however, some local authority does not think this enough and desires to improve the condition of its schools, it is free to do so but

must itself bear the further cost. In consequence of the equality of rights of public and nonpublic schools the law stipulates that any improvement in the condition of public schools must also be shared by nonpublic schools.

Fees. — Schools are not free; a scale of fees is drawn up by the town councils, and must be accepted for the nonpublic schools. Fees range from nothing to G. 80 ¹ for elementary schools; from nothing to G. 400 for secondary schools, according to the financial status of the parents. The revenues from fees are small in comparison to the total cost of education.

Inspection and supervision. — The Minister of Education is responsible to the Crown and Parliament. He is assisted by an Educational Council, consisting of leading educational men of all parties, who advise him in all important matters. Under the Minister there is a staff of inspectors for various branches of education — elementary, secondary, technical, agricultural, and physical education. For work among the adolescents a so-called Youth Council advises the Minister as to measures regarding adolescent education.

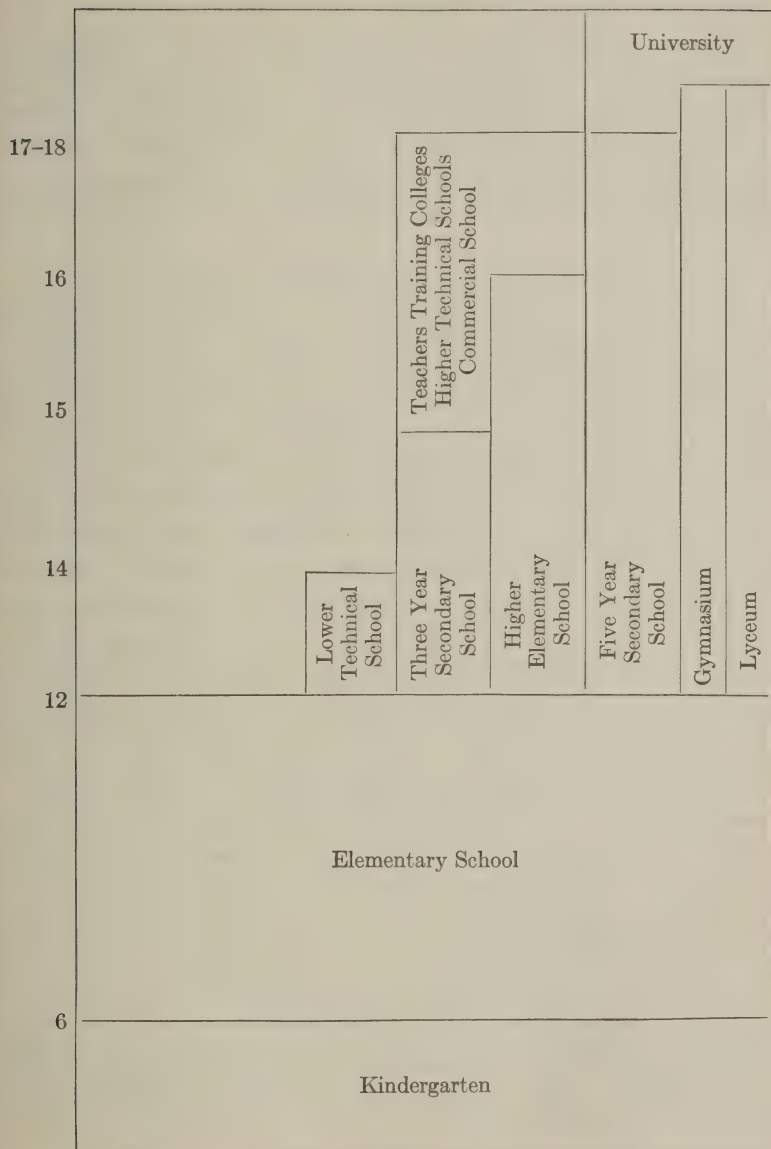
The coöperation between inspectors and teachers is generally good. But there is always the danger that "red-tape" may take the place of the stimulating personal work of able inspectors.

PRESCHOOL AND KINDERGARTEN EDUCATION

Until recently the state paid little attention to the kindergarten for children of preschool age. Kindergartens were generally private institutions, many of them very bad. Formerly they were merely places where small children of the preëlementary-school age were kept; hence the name *bewaarschool* (*bewaren* = to keep, to store), which is still

¹ Guilder, gulden, or florin = \$0.40; \$1 = G. 2.50.

THE DUTCH EDUCATIONAL SYSTEM



used. The teachers were not trained and received a ridiculously low salary. In the last fifty years conditions have been greatly improved. Training colleges for kindergarten teachers have been opened, powerful social institutions like *De Maatschappij tot Nut van't Algemeen* have emphasized the importance of the preschool age, modern kindergartens have been founded everywhere either by town councils or by private associations, and salaries of the teachers have been raised.

Some years ago it was proposed in Parliament to organize a kindergarten system all over the country, but up to the present the measure has not been passed and it is very uncertain whether anything of importance will be done by the State in the near future. Fortunately most towns have very effective municipal or sectarian kindergartens.

The work is generally conducted on Froebelian lines. Dr. Montessori's ideas have had an influence that is still felt; several Montessori schools are found, while others aim at a synthesis of what is best in Froebel and Montessori.

Unlike the English and American systems our kindergartens are organizations apart, generally conducted in separate buildings. Although attendance is not compulsory, the growing popularity of the modern kindergartens is shown in an increasing number of pupils yearly.

According to the latest available statistics there were in 1922:

Schools	1,299
Teachers	2,638
Pupil-teachers	1,078
Pupils, boys	71,494
Pupils, girls	71,568
Pupils, total	143,062

Salaries vary as the town councils or school boards fix their own figures. The salaries for the three principal towns are:

	TEACHER	PRINCIPALS
Amsterdam	G. 1000 — G. 2400	G. 2700 — G. 3300
Rotterdam	1500 — 2400	2300 — 3200
den Haag	1500 — 2700	2100 — 3100

In the smaller towns and in the country the salaries are much lower.

ELEMENTARY EDUCATION

Compulsory attendance. — In 1898 school attendance was made compulsory. Every Dutch child must attend an elementary school for six years or up to the age of thirteen. The result has been beneficial. The number of illiterates is very small; only 0.48% of the young men entering the army could neither read nor write (statistics of 1922). Parents neglecting to send their children to school regularly are liable to fines, in some cases even to imprisonment. The inspectors of elementary schools, assisted by committees, control the attendance. On the whole the Dutch are convinced of the desirability of this measure and attendance is very regular. Attempts to extend the compulsory period up to fourteen years have failed.

Children may pass from the elementary school to secondary, technical, and other schools, generally at the age of twelve. Those who do not continue their education are not allowed by the Labor Act to begin working before fourteen. Here lies one of the most urgent and serious problems of our times, for nothing is more fatal to youth than idling and loafing. The boys and girls, especially the boys, since the girls are kept at home to assist in the household, leave school at thirteen, some even at twelve, and are doomed to idleness if they do not enter some other school. It is especially the poorer classes who are victims of this "fatal gap," which

involves the danger that the greater part of these boys will turn to "blind-alley jobs."

It is clear that either the Education Act or the Labor Act must be altered in order to bridge this gap. Compulsory education up to fourteen would involve a great amount of expenditure, and it is hardly likely that Parliament would sanction it in these days of economy and retrenchment. Modification of the Labor Act would create strong opposition from the side of all democratic parties. The problem is under investigation at present; educationally speaking it is one leading to the work school (*arbeidsschool*). One of the ways out would be a part-time system — the pupils working for half a day and spending the other half in school with a curriculum adjusted to their occupation. In this way a solution is sought, satisfactory both to educators and social workers.

Curriculum. — In the Education Act the following branches of instruction are prescribed: reading, writing, arithmetic, Dutch language, Dutch history, geography, nature study, singing, drawing, physical training, and needlework (the latter only for girls). When there is an opportunity, manual training may be added. This curriculum is

TIME-SCHEDULE OF SIX-CLASS ELEMENTARY SCHOOL

	1	2	3	4	5	6	Year
Reading	360	330	330	300	240	210	Minutes per Week
Language	195	240	270	315	375	435	
Arithmetic	300	390	360	360	375	285	
Penmanship	195	180	140	90	30	30	
Nature study and science	30	30	60	75	60	90	
Geography	—	—	60	90	90	120	
History	—	—	—	60	90	90	
Drawing	105	60	90	60	90	90	
Singing	120	120	90	60	60	60	
Physical training	20	90	90	90	90	90	
Play	225	120	60	60	60	60	

This schedule is modified somewhat to include *needlework* for girls.

compulsory for all schools, public or nonpublic. Sectarian schools add religious instruction to their program. Reference has been already made to the problem of teaching a foreign language in elementary schools.

Though the program for all schools contains the same branches of study, it is far from uniform in details. Circumstances differ widely in Holland; country schools (rural schools), in which a couple of teachers are responsible for the whole school, cannot pay attention to the various details of all the branches of the curriculum. Physical training, for example, which in towns is given by specialists, is also the task of the teachers in small schools in the country. Though splendid work is done by able men and women in out-of-the-way parts of the country, the elementary-school curriculum requires too many talents in a single human being.

Elementary schools for the masses have always paid great attention to the study of the three R's; of these branches it is arithmetic which is most attacked in present-day investigations. There was a time when the solution of difficult artificial problems was considered to be good exercise for mental training. The educational value of this work is severely challenged by our psychologists and educators. Owing to the growing influence of Anglo-Saxon educational thought, we tend to attach higher value to *drill* than to intricate reasoning about abstractions. The *how* is more important than the *why* so far as the mind of the elementary school child is concerned.

Another much discussed branch of the curriculum is history. A great number of principles, sometimes contradictory, are advocated. Some educators abhor dates, others think them useful as a kind of skeleton of history; some wish to teach history aiming at world peace and a kind of world citizenship, others deliberately teach history with a patriotic trend; some wish to lay stress on the history of man's tools, clothes, houses, means of locomotion, etc., others desire to

bring the greatest Dutch men before the footlights and to arrange history round their life histories. The teaching of this part of the curriculum is especially difficult for the teachers of the public schools. The teaching in them must be "neutral," but experience shows that few can maintain neutrality in teaching history.

Parents' committees. — The new Education Act requires the establishment of a parents' committee in every public school. This new institution which at the beginning was received with some distrust from the side of the teachers, who saw a new kind of control in it, is slowly gaining ground. In the regulations the parents' committees are described as links between school and home. There are indications that their work will grow more important in future, when, as is urged by some, the management of the public schools will be intrusted to them.

Statistics of elementary education. — Holland had in 1923 a population of 7,086,913. There were then in this country 7038 elementary schools, of which 3835 were public and 3203 were nonpublic schools. Of the latter 1516 were Protestant schools, 1588 Roman Catholics, 3 Jewish, and 96 neutral. The schools employed 35,274 teachers, 57 per cent of whom were men. The total enrollment was 1,062,620 (548,063 boys and 514,557 girls). By ages the pupils were distributed as follows:

Under 6 years	4,398
Between 6 and 7 years	112,916
Between 7 and 8 years	141,717
Between 8 and 9 years	150,877
Between 9 and 10 years	149,716
Between 10 and 11 years	147,976
Between 11 and 12 years	136,490
Between 12 and 13 years	117,475
Between 13 and 14 years	66,597
Between 14 and 15 years	21,244
Over 15 years	13,214

POSTELEMENTARY EDUCATION

The American "educational ladder" is not found in Holland, but there exists a great variety of schools following the elementary-school period. These include higher elementary schools, and three-year secondary schools leading up to training colleges for teachers, higher technical schools, etc.; secondary schools (gymnasias, lycea) with courses leading up to the universities; and lower technical and vocational schools. These constitute the chief types open to pupils on completing the elementary school course. The responsibility both for parents and for teachers is great, since a choice at this stage, when a reliable opinion of a child's capacities can hardly be formed, is serious, and generally the choice of school at this period is final; for example, those intended for the universities must enter the secondary school at twelve, although it is possible, but unusual, to enter a university, by means of an entrance examination, along other ways than the secondary school.

HIGHER ELEMENTARY SCHOOLS

The higher elementary schools receive pupils who are either unfit for secondary education or who intend to enter upon a practical career. Their number is rapidly increasing and there are many who appreciate their work highly. The teachers are qualified to give instruction in foreign languages and in mathematics. The organization is based upon a partly specialist system; one teacher is responsible for a class but is assisted by four or five colleagues for part of the teaching. In his turn he assists in the teaching of the other classes in his own special field. By this method, similar to the English "form" system, the disadvantages of the pure-specialist system, found in our secondary schools, are avoided.

The curriculum includes reading, writing, mathematics, languages (Dutch, German, French, English), history, geography, science, nature study, drawing, singing, physical training, needlework. Some add to these commercial training or agriculture. Most schools have a four-year course at the end of which successful pupils may obtain a certificate, which carries with it eligibility for admission into some government offices, railway service, etc.

TIME SCHEDULE OF FOUR-CLASS HIGHER ELEMENTARY SCHOOL FOR BOYS
AND GIRLS (12-16)

	1 Yr.	2 Yr.	3 Yr.	4 Yr.
	Periods of 50 minutes each			
Dutch	4	3	3	4
Reading	1	2	1	1
French	5	4	4	4
German	4	4	3	4
English	—	4	4	4
History	2	2	2	2
Geography	2	2	2	2
Mathematics and arithmetic . .	5	4	7	5
Nature study and science . . .	2	2	2	2
Drawing	1	1	1	1
Physical training	2	2	1	1
Needlework (girls)	2	2	2	2
Writing	1	—	—	—
Singing	1	—	—	—

SECONDARY EDUCATION

Secondary education presents a great variety of types. The most important are:

(a) *The gymnasium* with a classical curriculum: Latin, Greek, Dutch, German, French, English, mathematics, history, geography, physics. The course lasts six years; its successful completion entitles a student to a certificate of admission into the university.

(b) *The hoogere burgerschool* (high school) with a five-year course. Curriculum: Dutch, German, French, English, mathematics, physics, nature study, history, geography, and some minor branches. This school has a strong mathematical bias. The pupils are either destined for the university, especially for the more technical studies, or enter upon a practical career immediately on graduation.

(c) *The lyceum*, a kind of compromise between the *gymnasium* and the *hoogere burgerschool*. Owing to the fact that pupils are admitted to secondary schools at the age of about twelve, when it is hardly possible to give a reliable prognosis as to the further development of their abilities, many mistakes were formerly made in the choice of a secondary school. To avoid this and to postpone the important decision regarding a child's further study, a new type of school has recently been created which is steadily growing in popularity. The pupils entering the lyceum have a common curriculum during the first two years, after which they may enter for four more years either the classical or the mathematical section corresponding respectively to the *gymnasium* and the *hoogere burgerschool*.

The experience of the last few years is much in favor of the lycea. The final examination constitutes the admission examination for the universities, as in the case of the other types.

(d) *Commercial schools* preparing for commercial careers in a five-year course. The curriculum includes Dutch and foreign languages, bookkeeping, political economy, history, geography, etc. Much attention is paid to practical commercial matters.

Besides these we find girls' schools (five-year course) and secondary schools with a three-year course. The following statistics for 1922 will give some idea of the development of secondary education in Holland:

TIME SCHEDULE OF AMSTERDAM LYCEUM

Years	COMMON FOUNDATION						GYMNASIUM						HOOGERE BURGERSCHOOL					
	I _A	I _B	II	II _A	II _B	II _G	III _A	III _B	IV _A	IV _B	V	VI	3 _A	3 _B	4	5	6	
Periods																		
Dutch	3	3	3	3	3	3	2	2	2	2	2	2	3	3	2	2	2	
French	5	5	5	3	3	3	2	2	2	2	2	2	2	3	2	2	2	
German	4	4	4	2	2	2	2	2	2	2	2	2	3	3	2	2	2	
English	—	—	—	4	4	4	2	2	2	2	2	2	2	3	2	2	2	
Greek	—	—	—	—	—	—	3	3	9	9	8	9	—	—	—	—	—	
Latin	—	—	—	—	—	—	10	10	8	8	3	10	3	3	2	2	—	
History	4	4	4	3	3	3	4	4	2	2	1	4	3	3	—	—	—	
Geography	3	3	3	3	3	3	2	2	—	—	2	2	2	3	2	2	2	
Mathematics	5	5	5	5	5	5	3	3	2	2	2	2	6	6	5	6	4	
Biology	3	3	3	2	2	2	—	—	—	—	3	2	2	2	2	2	2	
Physics	—	—	—	2	2	2	2	2	2	2	2	2	2	2	2	2	3	
Chemistry	—	—	—	—	—	—	—	—	2	2	1	3	4	2	3	6	4	
Mechanics	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	(2)	
Cosmography	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
Economics	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	
Commerce	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	(3)	
Drawing	2	2	2	2	2	2	1	1	—	—	—	—	2	2	4	2	2	
Manual training	2	2	2	2	2	2	—	—	—	—	—	—	1	1	—	—	—	
Physical training	2	2	2	2	2	2	2	2	2	2	1	1	3	3	3	2	—	
Singing	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	

NOTE: The figures in parentheses in the 5th and 6th year of the Gymnasium and the 5th year of the Hoogere Burgerschool represent alternative courses.

TYPE	NUMBER OF SCHOOLS	PUPILS		
		Boys	Girls	Total
Gymnasia	72	—	—	7,271
Hoogere burgerscholen . .	113	16,252	4,962	21,214
Lycea	16	1,764	495	2,259
Commercial schools . . .	35	—	—	1,612

The total cost of secondary education was about G. 12,000-000. School fees range from nothing to G. 400 per annum.

Admission to secondary schools. — Formerly entrance to secondary schools was only possible after passing an entrance examination. In course of time this policy was severely attacked since all the evils of an examination system with its fatal influence on elementary education resulted. Consequently the entrance examination has been abandoned and in its place admission on a certificate of capacity from the headmaster of an elementary school has been introduced. With the establishment of the common school every headmaster of an elementary school is entitled to issue certificates of capacity for his pupils. Obviously the chief defect of this system is the variety of standards among the teachers. Moreover there is a misunderstanding in some circles as to the desirability of giving secondary education to as many children as possible.

In general the complaints from the secondary schools are that the pupils are given certificates rather indiscriminately so that many enter who are not suited for the severe intellectual studies of our secondary education. There are many elementary teachers who lack a clear insight into the requirements for further study, often confusing satisfactory achievements in school with adequate native ability. The problem of the entrance to secondary schools is now being studied. What the result will be cannot be predicted; whether an

intelligence test will be given or whether the first year of the secondary schools will be so reorganized as to be a trial year, this much is certain: the question is clearly an urgent one.

VOCATIONAL EDUCATION

The number of trade and vocational schools is very large. There is hardly any trade but has its own special schools, generally divided into higher and lower technical schools. Besides the commercial schools, mentioned under secondary education, we find 12 technical high schools, 111 vocational schools for girls, 135 evening schools for junior clerks, and numerous lower technical schools, agricultural schools, and trade schools.

TEACHERS

Training and certification of elementary teachers. — The Education Act forbids anyone to teach in schools without a teacher's certificate. Teachers are trained in colleges with a three-year course. The curriculum consists of Dutch language and literature, handwriting, history, geography, physics, nature study, music, pedagogy, drawing, mathematics, physical training, French, German, English, agriculture (optional), hygiene, manual work, and needlework (for women). At the end of the course there is a final examination. During their training students have to teach for part of the day in one of the elementary schools attached to the college under the supervision of a class teacher.

The teacher's certificate only qualifies for positions as class teachers. Most teachers continue their studies after leaving the training college in order to gain the headmaster's certificate, which gives the right to apply for the post of principal of an elementary school. The branches of study for this certificate are: Dutch language and literature, pedagogy, history, and geography. Candidates must have

taught in an elementary school for at least two years to be admitted to the examination. The requirements are rather severe and, as study is only possible in the evening after a long teaching day, many young teachers have some difficulty in obtaining the headmaster's certificate.

At present the supply of teachers is more than the demand and many possess the certificate who cannot find a situation.

Tenure. — When a teacher is appointed to an elementary school, whether public or nonpublic, he keeps his post until he is dismissed. The Education Act contains some articles regarding the dismissal of teachers. Generally they are considered to be nominated for life, with the exception of married women. Public opinion in some parts of the country is against married-women teachers and thus in most nonpublic and in some public schools a teacher has to resign when she marries.

Salaries. — Salaries are paid by the state and vary according to several circumstances. All localities in Holland are arranged in three classes. Amsterdam, a big town, is in the first class; a hamlet is in the third. The salaries given below are first-class salaries, the second and the third classes show a reduction of four and eight per cent. Married teachers receive more than unmarried. The possession of the headmaster's certificate entitles the holder to an addition to his salary, and headmasters have some further addition for their extra duties.

CLASS TEACHERS

		With Headmaster's Certificate
Minimum	G. 1000	G. 1300
Maximum (unmarried)	2200	2700
Maximum (married)	2600	3100

HEAD TEACHERS

Minimum	G. 1800	G. 2000	G. 2200 (depending on the number of pupils)
Maximum (unmarried)	3000	3200	3400 (depending on the number of pupils)
Maximum (married) .	3400	3600	3800 (depending on the number of pupils)

For special certificates, *e.g.*, for teaching a foreign language, G. 50 is added to the salary for each certificate up to the number of three.

Pensions. — At the age of sixty-five, or earlier if on account of ill-health, a teacher is entitled to a pension of $1\frac{3}{4}$ per cent of his average salary during the last three years of service multiplied by the number of years of service. Thus a teacher retiring after twenty years of service with an average salary of G. 2,800 receives $20 \times 1\frac{3}{4} \times \text{G. } 28$, or G. 980, as a pension. The maximum pension is 70 per cent of the average salary of the last three years of service.

Training and certification of secondary teachers. — Secondary teachers are trained either at the university or by private study. Emphasis is laid on the thorough knowledge of the special branch which a teacher undertakes to teach. Little, if any, preparation is given on the professional side of teacher's work.

Salaries. — It is very difficult to give figures as the remuneration depends on the number of hours taught, the certificate required, and the place of residence. We may say roughly that a full-time secondary teacher has a salary of about G. 5000. The pension system is the same for secondary as for elementary school teachers.

EDUCATIONAL TESTS AND MEASUREMENTS

Tests are used only for the examinations of candidates for the schools for mental defectives. The system used is some

adaptation of the Binet-Simon test. The Dutch teachers are not in favor of tests. Promotion to a higher class and transfer to a higher school depend on the teacher's report or on some examination. Educators are studying the subject of tests closely; at present an investigation is being conducted on the possibility of introducing intelligence tests for entrance to secondary schools.

MEDICAL AND SOCIAL WELFARE OF SCHOOL CHILDREN

Most elementary and some secondary schools are under the supervision of medical experts. Some large towns, such as Amsterdam, The Hague, and Rotterdam, have a competent staff of school physicians and school nurses. The morning is generally interrupted by a break of a quarter of an hour for recreation. In some places open-air schools are found.

Wherever possible physical education is in the hands of specialists. Formerly the rigid German *Turnen* was the universal system in Holland. In the last decade the Swedish system has found many supporters. The intense propaganda for a good system of physical education has been successful. Sports are very popular among our youth, and there is even a danger of exaggerating the importance of it. Camping and excursions of pupils under the guidance of the teachers are steadily gaining ground. From England the boy-scout movement was introduced and has been found to be a beneficial factor in the education of the adolescents.

UNIVERSITIES

For a small country like Holland the number of universities is great. Unfortunately the tendency of splitting up into sects has also influenced this part of education. There are three State Universities at Leiden, Utrecht, and Groningen. The town of Amsterdam supports a university of its

own. The Calvinists have a university at Amsterdam; the Roman Catholics a university at Nijmegen.

Besides these six universities there are a Technical University at Delft, an Agricultural University at Wageningen, a Commercial University at Rotterdam. At the universities of Leiden and Utrecht departments for the study of colonial problems train the future officials in the East Indies.

CURRENT PROBLEMS IN EDUCATION

Besides the urgent problem of the common school, the teaching of a foreign language in elementary schools, discussed at the beginning of this article, mention must be made of the Dalton Plan, the *arbeidsschool* (school of activity), and the teaching of history.

Dalton Plan. — The name and the work of Miss H. Parkhurst were first heard of in Holland in 1923 when the present writer introduced the Dalton Plan in Holland. Early in 1924 a Dutch delegation, consisting of Prof. Dr. Ph. Kohnstamm of the University of Amsterdam, Mr. L. C. T. Bigot, principal of a training college at Arnhem, and the writer, was sent to investigate the working of the plan in England. They published their results in a book, *De Toekomst van ons Volksonderwijs* (*The Future of our Elementary Education*), which was widely read and discussed. Many teachers tried the Dalton idea in some form or other. At present the Dalton Plan is slowly progressing. A complete trial with subject rooms and specialists has not yet been undertaken. It may be stated that the coming years will see many changes, especially in elementary education, due to the study of the Dalton system.

School of activity. — The two forms of activity school (*arbeidsschool*) attracting the attention of Dutch educators are the German *Arbeitsschule* in its numerous variations and

the American *work-study-play plan*. Both have been studied only theoretically. Teachers in favor of the activity-school idea generally introduce manual training in their curriculum.

Teaching of history. — Several factors make this problem rather intricate. Many influences can be traced. This question became of great significance to all true lovers of mankind after the world war. Must the child be taught about wars and battles? Must we confine ourselves to the great men of our country only or should we direct the child's attention to the grand figures in world history? Must the stress be laid on the history of tools, housing, etc., or on the human element? Is our aim to educate for good Dutch feeling or for a feeling of world citizenship? Is it possible to give "neutral" teaching in history and, if not, where are the limits? It will be clear that the position of a public school teacher as regards this subject is a very delicate one.

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DUTCH EAST INDIES

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DUTCH EAST INDIES

INTRODUCTION

The political and social conditions in the Dutch colonies differ in so many respects from those of other dependencies, as, for example, British India and the Philippines, that a general introduction is necessary to make the present account of the educational organization of the Dutch East Indies intelligible to the foreign reader. Compared with the educational systems in independent homogeneous countries colonial education tends to show a certain absence of consistency and a lack of close articulation, because it must be adapted to a collection of groups in the population differing so greatly in race, language, history, and development. This will appear the more striking in a colonial empire like that of the Dutch East Indies, where the situation is in many ways more complicated than elsewhere.

The Dutch colonist. — Leaving out of account the simple training provided in vocational schools for the natives, the chief characteristic of education in the Dutch Indies is that it aims to follow the system of the mother country. The reason for this is that the Dutch official, merchant, or manufacturer actually takes up his residence permanently in the colony. Here he settles with his wife and children, keeps his children at home for their education, brings them back with him on his return from furlough, and only sends them to the mother country when he cannot find in the colony the educational opportunities that he desires for them. As a rule the civil servants must serve twenty years before acquir-

ing a right to a pension; many serve longer than this in order to increase the amount of their pensions. Large commercial concerns make similar provisions for their employees in many cases. These Dutchmen naturally desire to have schools in the Indies of the same type as in Holland, so that when they return home on furlough their children can fit easily into the Dutch system, and when they come back, can continue their education without loss of time.

Educational legislation in Holland, it should be noted, aims to secure uniformity in the main features of the most important types of elementary and secondary schools, whether provided by the state, local communities, or private organizations. As a consequence, therefore, elementary and secondary education provided by the Government for Europeans in the Dutch East Indies is modeled entirely on the system of the mother country.

Intermingling of races. — Another feature of the social life of the colony is the position of those of mixed blood, the Indo-Europeans or Eurasians, who are difficult to distinguish on the surface. These according to the Constitution do not form a separate group and before the law enjoy exactly the same position as pure Dutchmen. They are found in the highest civil and military positions as well as among the lowest classes. There are among them some who cannot even express themselves in Dutch but who are consciously Dutch in sentiment, especially where education is concerned. Officially the Government does not show the slightest discrimination against them; hence commerce, industry, shipping may be said to be showing almost daily progress, particularly because the Indian enjoys the same intellectual opportunities as the Dutch.

The place of Dutch. — The situation so far described has had two important consequences for education. First, the standard of general education with Dutch as the medium of

EDUCATIONAL SYSTEM WITH VERNACULAR AS MEDIUM OF INSTRUCTION

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instruction is placed on the same level as in the mother country. All the natives who desire advancement must in fact adopt this standard unless they wish to remain in a condition of inferiority to the Dutch. The poor Indians who constitute the lowest level of native society have even more right to admission to the Dutch schools, because access to them, particularly for elementary education, is beset with all kinds of difficulties for the natives. This has led to the establishment of elementary education for the natives, which aims, though by different methods, to bring them to the same goal as is reached by the specifically Dutch schools.

The organization of schools. — No schools are recognized as exclusively for Europeans (Dutch and Indo-Europeans), while there are schools provided for distinct native groups. The result is that there are schools attended by representatives of every group in the population: Dutch, Indo-Europeans, Chinese, Javanese, Soondanese, young people from the Moluccas and Celebes, and so on. An equally mixed representation is found in the European elementary and secondary schools, in the Technical Faculty and in the Faculty of Law, and will soon be found in the Faculty of Medicine which is to be opened in 1927. The principle of race intermingling is held in high respect.

Schools accessible to natives only are the *desa* or rural schools, the native schools of the second class (district schools), the vocational schools based on these, the Dutch-vernacular schools in which the medium of instruction is Dutch, and the normal schools for training native teachers. For the Chinese there are Dutch-Chinese elementary schools with Dutch as the medium of instruction; with these is associated a normal school for training Chinese teachers.

The educational system is thus divided into four groups: (1) Schools exclusively for natives with a vernacular as the medium of instruction. (2) Schools exclusively for natives

EDUCATIONAL SYSTEM WITH DUTCH AS MEDIUM OF INSTRUCTION

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with Dutch as the medium of instruction. (3) Schools exclusively for Chinese with Dutch as the medium of instruction. (4) Schools for all races with Dutch as the medium of instruction.

It should be recalled that the Dutch East Indies cover a territory of 68,300 square miles and have a population of about fifty million. Of the population about 170,000 in round numbers are Europeans and 880,000 are foreign Asiatics, among whom the Chinese predominate.¹

ADMINISTRATION OF EDUCATION

Central administration. — Educational legislation is in the hands of the Governor-General assisted by his councilors; this holds as long as it remains within the scope of the budget and does not come into conflict with educational legislation in Holland. The Dutch Indies have a People's Council, whose members are partly elected, partly nominated. This Council acts as an advisory body and can exercise an important influence on the development of education.

The administrative organ is the Department of Education and Religious Affairs, at the head of which is a director charged with the general direction of education. He represents the government in the People's Council but is not responsible to it. Education is greatly centralized; all appointments of any importance, all decrees and regulations emanate from the central authority.

On questions of a general nature the director of education

¹ The present article does not deal with the Mohammedan schools, which are numerous and which are found without any supervision whatever in Java and in the outer provinces. Education is extremely primitive and limited to learning the Koran by rote. There are also private unaided Chinese schools, often strongly nationalistic in character and giving chief attention to instruction in the Mandarin dialect and sometimes including English. The Arabs and Klingalese often have their own schools, but official data on these are not available.

is assisted by an Advisory Council of Education, in which the inspectors of different grades have seats as well as representatives of teachers' professional organizations and of various other societies. The Council has a bureau in which two working members prepare reports on questions that have been submitted for consideration by the Council. The bureau has an educational library and a cataloguing department.

Inspection and supervision. — The supervision of schools is conducted by inspectors appointed by the Government for all types of education, general and vocational. The inspectors serve as advisers to the director of education and give guidance to the teaching personnel.

Educational finance. — Education in general is public and supported wholly by the government. Fees are charged to all who can pay and are not being specially trained for the civil services. Societies of a secular or denominational character that desire to establish schools may receive aid from the Government on condition that their curricula and the qualifications of the teachers are approved; the teachers in such schools must be paid the same salaries and have the same pension provisions as teachers in the public schools. Separation between Church and State is thus unknown in the Dutch East Indies; even the clergy receive salaries from the Government.

Local administration. — In the larger communities there are boards of education, nominated by the local councils, but their power is limited to general supervision and advice. For secondary schools there are supervisory commissions, nominated by the Governor-General but similarly enjoying only supervisory and advisory powers.

Indian communities establish schools and receive subsidies from the government on condition that they accept government supervision in such matters as finance, curriculum, and the qualification of teachers.

PRESCHOOL AND KINDERGARTEN EDUCATION

An organized system of preschool and kindergarten education does not yet exist. Some elementary schools have attached to them preparatory classes which correspond to Froebelian schools. The government, it is true, maintains a school for the training of kindergarten teachers, but the graduates are in the main employed as teachers in the preparatory classes of the elementary schools where they have been established. There are besides several private Froebelian kindergartens.

ELEMENTARY EDUCATION

Compulsory attendance. — Compulsory school attendance has not yet been established in the Dutch East Indies. The opportunities to obtain an education are still too slight, owing to the lack of schools, with the result that more than ninety per cent of the native population is illiterate.

A fairly high tuition fee is charged, but under certain conditions poor but able pupils can receive their education free. In some schools scholarships, covering the cost of maintenance, are available and awarded only to gifted pupils. The amount of tuition fees is graduated according to the income of the parents.

Elementary schools. — The system of elementary schools is divided into native and European schools. Of the native schools there are three types :

1. The *dessa* or *rural schools*, which give a course of three years including the vernacular, arithmetic, and simple nature study based on the local environment. The chief task of these schools is to combat illiteracy. The village communities (*dessas*) must themselves contribute to the maintenance of these schools.

2. *Native schools of the second class (district schools)* with a five-year course in reading, writing, arithmetic, geography, and nature study. In non-Malaysian districts Malaysian is also taught. In the larger towns this school furnishes the normal type of education for the majority of the natives. Outside of the towns these schools serve as a kind of standard school in the midst of a number of rural schools. There is a movement to articulate the rural schools with the higher classes of the native district schools.

3. *Dutch-vernacular schools* with a course of seven years. This type has been established for the benefit of natives for whom a knowledge of Dutch is essential. The medium of instruction is the vernacular, and in non-Malaysian areas Malaysian must also be taught. Besides Dutch and the vernacular, Malaysian, the curriculum includes arithmetic, history, geography, nature study, singing, drawing, and, more recently, gymnastics.

The European elementary schools, with which the Dutch-Chinese schools are also grouped, give a seven-year course in Dutch, arithmetic, history, geography, nature study, drawing, and gymnastics. In addition there are special schools for other distinct native sections of the population.

Problems in elementary education. — There are numerous problems concerning elementary education. The most important is the effort to make education less scholastic. There are officials for manual training and physical education whose task it is to promote this effort.

The Dutch-vernacular schools are at present attracting the attention of educators. This type of school is causing serious concern because the native children begin Dutch before they are able to command their own vernacular to any extent. Attempts are being made to construct a course of study that will meet these difficulties without lowering the quality of the instruction in Dutch. For, as will be pointed

out later, the Dutch-vernacular schools have the task of preparing their pupils for the next stage in education in which Dutch is the medium.

The rising nationalism among the peoples of the East Indian Archipelago has resulted in a demand for a more national education. Freedom from Western control is sought through an education that would be given in the vernaculars in the higher fields as well and would pay attention to the greatness of the natives' own past. In a word an education is looked for that would prepare the Indians for the struggle for national emancipation. This movement has led to the establishment of many national schools, which neither receive nor seek subsidies and which are under the political supervision of the Government.

Until recently French was also taught in some of the European elementary schools, as was the case in Holland. For the past four years this subject has been dropped in the Dutch schools, and as a result of the connection with education in the mother country the colonial schools must do the same. In a short time, however, French is to be reintroduced. Dutch culture has for ages been under the influence of French culture, and the teaching of French in the elementary schools was affected by this. But in the Indies Anglo-Saxon influences are very markedly strong, while French plays an unimportant part. Hence the educators in the colonies do not view with favor the reintroduction of French. A serious argument against French in the elementary schools is that many children in the colonial schools are of Indo-European origin and they still find considerable difficulty with the language of instruction, Dutch.

HIGHER ELEMENTARY SCHOOLS

Higher elementary schools, known as *Muloscholen* from the initials of their Dutch title, *Maar-Uitgebreid-Lager-Onder-*

wijs, may be compared with the American junior high schools. The course is three years in length and is based on the work of the European, Dutch-vernacular, and Dutch-Chinese elementary schools. The native pupils generally attend a preparatory class. The curriculum includes Dutch, English, arithmetic, algebra, mensuration, nature study, history, civics, geography, and drawing. Singing, French, and vernacular are optional. These schools have increased rapidly in the last few years. In 1915 there were 16 schools with an enrollment of 1172 pupils; in 1924 there were 35 schools with an enrollment of 6878, including 3349 natives and 674 Chinese.

These higher elementary schools are of great importance in the educational system of the Dutch Indies. In the first place, they give an advanced education on a Western basis to all sections of the population, and secondly, they give access to the secondary vocational schools (*middelbare vakscholen*) for medicine, law, agriculture, veterinary medicine, commerce, and navigation. A very important function, moreover, is the preparation that they give for the general secondary school (*algemeene middelbare school*), which is divided into three departments: scientific, Western-classical with Latin, and Eastern-literary with Javanese and Malayesian. These schools in turn prepare for admission to the various faculties of the universities.

This organization of elementary, higher elementary, and secondary schools has been adopted in order to provide a route to the University most suited to the needs of the natives.

SECONDARY EDUCATION

Secondary education includes the secondary schools (*hoogere burgerscholen*), of which four give a five-year course and one a three-year course. The curriculum includes

Dutch, French, English, German, arithmetic, algebra, mensuration, mechanics, nature study, chemistry, cosmography, freehand and linear drawing. The graduation diploma, like that of the general secondary school, entitles to admission to the University, technical, commercial, and agricultural high schools, etc.

There are besides seven subsidized private secondary schools for girls which give a good preparation for the courses for training teachers.

Much criticism has been raised of the curriculum of the higher elementary and secondary schools. It is felt that it is too extensive and scholastic, and that the schools attend too much to instruction and too little to education. The American principle is proposed of a core of compulsory subjects and a number of electives. One of the leaders in this movement is the writer of the present article who has personally observed the advantages of this principle in the United States. At present the number of periods, 33 to 40 periods of 45 minutes each per week, is too great and the number of subjects excessive. Manual work is not found in the secondary schools, while physical education is still in its beginnings.

VOCATIONAL EDUCATION

There are vocational schools for commerce, law, agriculture, veterinary medicine, technology, medicine, and navigation, for the preparation of native civil servants, and of native and European teachers, etc. For the natives there are agricultural schools, normal schools, schools for nurses, a school of navigation, all of which are articulated with the native schools of the second class and in which Malaysian is the medium of instruction. The other vocational schools are of the type of intermediate and secondary schools; as examples may be mentioned the four-year tech-

nical schools articulated with the elementary schools and preparing for the building and mechanical trades, and the intermediate agricultural schools also based on the elementary schools.

The medical colleges, which are based on the higher elementary schools and give a course of seven years, are of great service for the training of native doctors. The graduates fill positions in the lower medical services.

The majority of the students of the vocational schools later enter the civil service, government offices, public-health service, the state railways, and so on, while they readily receive appointments in private concerns also. Surprise may be caused by the fact that the schools of navigation do not flourish in the great island empire of the Dutch Indies. The reason for this is that the large steamship companies prefer to employ Dutchmen trained in Holland. The native nautical schools are not attended by pure Dutchmen, and the large majority of the pupils is native.

Vocational education has not developed as well as was expected. The years of unrest have had an influence on this, so that some of the schools show a decline in the enrollment. The charge that is often made against the vocational schools is that they are not sufficiently practical. Further, manual work is not popular with some of the well-to-do natives. Here, too, the example of the United States would be helpful.

TEACHERS

Training and status. — Owing to the great variety of schools in our Archipelago, there is a great variety of institutions for the training of teachers. For the training of rural school teachers there are normal courses, and for training teachers in the native schools of the second class there are normal schools. Teachers for the Dutch-vernacular schools

are prepared in the lower and higher training schools (*hoogere kweekscholen*), while there is also a higher training school for teachers in the Dutch-Chinese schools. Secular and denominational societies are subsidized under certain conditions to establish and maintain training schools. The Dutch teachers for the elementary school come for a large part from Holland, but there are in the Dutch Indies several institutions, public and private, for the training of teachers, which grant diplomas equivalent to those in Holland. The examinations are conducted by the state.

For the secondary schools the overwhelming majority of the teachers are obtained in Holland. These have been trained in the universities and have received a diploma in a special field which gives them the right to teach it in the schools. The opportunity is now provided in the Dutch Indies to obtain such certificates in English and mathematics. Great value is attached to diplomas by the Dutch and consequently by the natives. All kinds of legal provisions exist which define specifically the rights attaching to each diploma.

Salaries. — Salaries in all branches of the teaching profession were revised at the beginning of 1925. It is not possible to do more here than to present a few of the more important scales. The beginning salaries ¹ of native teachers vary with their training and the grade of school in which they are employed. They range from G. 17.50 to G. 165 a month to a maximum of G. 40 to G. 350 after a period of service of from 20 to 26 years.² At the extremes may be cited at one end the salary of rural school teachers rising from G. 17.50 to G. 30 after twenty years of service and at the other end the salary of teachers in Dutch-vernacular schools who have the

¹ All the salaries that follow are for the month.

² The currency in the Dutch East Indies is the same as in Holland. The *guilder* is nominally equivalent to 40 cents of United States money and has a purchasing power of about 36 cents.

diploma of a higher training school rising from G. 110 to G. 350 after twenty-three years of service. The salary of European elementary school teachers runs from G. 180 to G. 800, while the teachers in the higher elementary schools receive G. 100 additional, and the principals of such schools are paid G. 950. Inspectors of elementary and higher elementary schools receive from G. 950 to G. 1200; the maximum salary is reached after twenty-three years of service.

Secondary school teachers¹ are paid from G. 400 to G. 1100 after twenty years. Principals receive from G. 1000 to G. 1300; the inspector has a salary of G. 1400.

Pensions. — The normal length of service for natives is thirty years and for Europeans twenty years. For purposes of salaries and pensions periods of service in the mother country and furloughs are taken into consideration up to certain limits. The pension after twenty years of service amounts to about one third of the salary and rises proportionately for each year of service beyond twenty.

Furloughs. — After six years of unbroken service European teachers acquire the right to eight months' furlough in Europe with furlough pay. Each additional year of service entitles to an additional month of furlough up to a maximum of a year. Leave of absence to return to Europe is also granted in cases of sickness.

Teachers' associations. — The various groups of teachers are organized into more or less powerful professional associations, which hold annual congresses. The characteristic grouping of teachers along denominational lines which exists in Holland is also found in the Indies, so that there are non-sectarian, Roman Catholic, and Protestant teachers' associations.

¹ The fondness for titular distinctions, copied from Germany, distinguishes between the *onderwijzer* or elementary teacher and the *leerar* or secondary teacher.

Besides the annual meetings of each association special general congresses are held and receive state subsidies. At these congresses urgent educational problems of the day are discussed, such as the teaching of Dutch to natives; the place of native languages in education; Western or national-native education; a pedagogical university; the place of manual work in education; physical education. In 1925 the question of a pedagogical faculty in the Dutch Indies was discussed.

The study of education. — Scientific training in education has not yet reached a high level. Education is, of course, taught in the training schools but not by scientifically prepared teachers, while no professional preparation in education is required to teach in a secondary or technical school, a defect that is often very marked. The Dutch Indies with a great variety of races and complex conditions, a country in which the inhabitants are hungering for education, furnish a situation in which the teachers stand in particular need of preparation in sociology and education. Fortunately it is beginning to be recognized in Holland that the science of education must be seriously developed. The number of educational periodicals has increased rapidly, and courses in education are now offered in the Universities. Education in foreign countries is being studied and particular interest is being manifested in the educational system of the United States. The Dalton Plan is popular almost everywhere. Educational enthusiasm still waits to be aroused and institutions like the large centers for the study of education in the United States are still unknown.

From the foregoing it is clear that it is not possible as yet to speak of the use of educational tests and measurements on a large scale. The literature of the subject is spreading rapidly, but there are not enough experts in the field to apply it practically. When necessary, examinations, prepared as well as possible, are employed.

The Council of Education has two working members, but they are the only ones who by virtue of their office can devote themselves to the scientific study of education. The higher authority is still mainly administrative and political. The government did, however, send an educational commission a few years ago to study the educational system in the Philippine Islands. The report of the commission was of great value for education in the Dutch Indies.

The Java Institute, an association for the study of Javanese culture, subsidized by the Government, often discusses educational problems at its sessions.

MEDICAL AND SOCIAL WORK

School medical inspection is practically unknown. A few experiments with school doctors have been made here and there, but only schools with boarding departments have regular medical inspection. This is to be very much regretted since there is much sickness among the population.

Nor is physical education at all general, although a fair beginning has been made. The schools, especially the higher elementary and secondary schools, do not leave sufficient time for such training because of their overloaded curricula. Each school may, if there is sufficient spirit present, organize celebrations, excursions, and so on. The higher elementary, secondary, and vocational schools often have clubs that are fairly active and include athletics in their programs.

In the native schools the study of national culture is promoted, and older pupils are taken on excursions by their teachers to see old monuments or great manufacturing establishments. The climate is often a serious obstacle to the development of outdoor life of the kind found in the United States and in Europe, although the scouts organize camps from time to time.

UNIVERSITY EDUCATION

University education is still in its initial stages in the Dutch Indies. The college system as a link between secondary and university education is known as little here as in Holland. The graduate of the secondary school enters the university directly, although a university in the proper sense with a variety of faculties does not yet exist. A Technical Faculty was opened in 1920 at Bandoong, and a Faculty of Law in 1924 at Batavia, while in 1927 there is to be established a Faculty of Medicine. Those who receive degrees in these institutions are in the same position and are entitled to the same privileges as graduates of the universities in Holland. It should be mentioned here that the principle is respected of making no distinctions between natives and Europeans in rank or salary since both enjoy the same rights and privileges.

ADULT EDUCATION

The Department of Education and Religious Affairs has an important agency in its bureau of public libraries for spreading and promoting popular knowledge. The bureau distributes books in Dutch, Javanese, Soondanese, Madurese, and Malaysian languages. All native schools of any size are provided with a popular library by the bureau in the chief language of the district in which the school is located. In 1924 there were 2011 popular libraries in the vernacular and 145 libraries for Dutch-speaking natives. In 1916 there were only 709 of the former and 100 of the latter.

The bureau of public libraries also furnishes books to military barracks, hospitals, and other institutions. Little is done by the local communities in this field; in a few large towns there are public libraries established by private organizations outside of the government and financially assisted by the communities.

CURRENT PROBLEMS

Some of the problems of the moment have already been mentioned. In addition to those one of the pressing questions is that of the medium of instruction. Should the natives who are to learn Dutch begin this language from the beginning of their elementary education, that is, from their sixth year? Should an effort be made to employ the native languages in the advanced as well as the lower stages of education? It is a fact that the knowledge of Dutch opens the door for the native from his narrow insular life into the great world; at the same time it is true that the acquisition of a sound knowledge of Dutch is for them beset with great difficulties that can only be overcome by those of good ability.

The multiplicity of languages in the Dutch-Indian Archipelago itself renders it difficult to select one particular vernacular as the chief language. In Java there are three developed vernaculars, Javanese, Soondanese, and Madurese. The Island of Sumatra has a variety of vernaculars, of which Malaysian, Batakese, and Atjehese are of importance. On Bali Balinese is spoken; in the Celebes there are many different dialects.

At present a certain type of Malaysian has become the *lingua franca* in the Indian Archipelago and has been adopted as the official language for native officials who do not know Dutch. But the adoption of Malaysian as the general language and for science and culture is opposed by the twenty-three million Javanese who have a remarkably developed language and an important literature. The seven million Soondanese reject Javanese and the two million Malaysians consider High-Malaysian as the most important. In addition there are mixed communities: in East Java are mingled Javanese and Madurese, and in West Java, Javanese, Soon-

danese, and Malaysians. Probably the way out will be found in an effort to give as many natives as possible a good command of Dutch through better methods of instruction. Until recently there was among the natives an unquenchable thirst to learn Dutch. The nationalistic movement in awakening Asia, which is also noticeable in our Archipelago, has somewhat reduced this demand. Dutch is still sought but it is no longer given the first place.

Another important problem is the movement against the emphasis on bookwork in the schools, for which a balance is sought in manual training and physical education. Strenuous efforts are being made to improve the preparation of teachers, to establish closer articulation between the elementary and secondary schools, and to introduce differentiation in the preparation for entrance to the University. The value and significance of a classical education are also subjects under discussion.

Coeducation has never constituted a problem in the Dutch Indies. There are, it is true, separate schools for boys and girls, but they are practically all private schools or vocational schools. Elementary, higher elementary, and secondary schools are, in general, mixed schools. The education of girls was strongly influenced by the appearance about 1911 of the *Letters of a Javanese Princess* by Mme. Kartini. Many schools for girls are known as *Kartini schools*.

STATISTICS

ELEMENTARY EDUCATION

1. Schools for natives, with the vernacular as the medium of instruction :

Schools	Boys	Girls	Total	Teachers
15,164	934,940	171,595	1,106,535	27,110

2. Schools for Europeans, natives, and foreign Asiatics, with Dutch as the medium of instruction :

EUROPEANS			NATIVES		ASIATICS		Total	Teachers
Schools	Boys	Girls	Boys	Girls	Boys	Girls		
613	16,602	15,911	45,001	17,020	11,473	5509	111,516	3405

Of the teachers 887 men and 1241 women were Europeans.

HIGHER ELEMENTARY EDUCATION

EUROPEANS			NATIVES		ASIATICS		Total	Teachers
Schools	Boys	Girls	Boys	Girls	Boys	Girls		
35	1406	1449	2803	546	582	92	6878	337

Of the teachers 251 men and 68 women were Europeans

SECONDARY EDUCATION

EUROPEANS			NATIVES		ASIATICS		Total	Teachers
Schools	Boys	Girls	Boys	Girls	Boys	Girls		
14	1344	1068	206	41	217	52	2932	270

VOCATIONAL SCHOOLS

TYPE OF SCHOOL	NUMBER OF SCHOOLS	MEDIUM OF INSTRUCTION	STUDENTS	TEACHERS
Technical	6	Dutch	1744	125
Technical	20	Vernacular	1522	83
School of navigation	1	Dutch	8	4
School for native sailors	1	Malaysian	294	5
Schools of commerce	3	Dutch	309	32
Schools of agriculture	4	Dutch	310	40
Schools of agriculture	41	Vernacular	475	?
Schools of medicine	2	Dutch	636	?
School of law	1	Dutch	93	7
Schools for native civil servants	8	Dutch	578	37
Schools for native teachers	17	Dutch	1386	86
Schools for Dutch-Chinese teachers	1	Dutch	103	6
Schools for native teachers	20	Vernacular	1283	82
Schools for European teachers	27	Dutch	938	?

There are in addition courses in vaccination, courses for analysts, chemists' assistants, municipal employees, glass-blowers, instrument makers, nurses, etc., the figures for which are not included in the above.

University education. — The Technical Faculty at Bandoeng had a total of 90 students (63 Europeans, 18 natives, 9 foreign Asiatics). The Faculty of Law had 45 students (19 Europeans, 18 natives, 8 foreign Asiatics). The number of instructors in the Technical Faculty was 12 and in the Faculty of Law 9.

Cost of education. — The budget for the Department of Education and Religious Affairs in 1924 was G. 53,884,251 or ten per cent of the total budget of the Dutch Indies, G. 561,691,498. The allocation of the budget makes it difficult to give specific details; this difficulty is increased by the great variety of schools and teachers. The expenses for personnel and equipment in 1924 was G. 37,864,900. The income from fees, sale of books, and supplies was about G. 5,183,000.

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Educational Journals

A scientific journal of education does not yet exist in the Dutch Indies. The teachers' associations have their own weeklies in which educational matters are discussed. The monthly magazines, *Indische Gids* (Indian Guide) and *Koloniale Studiën*, occasionally contain articles on education, while problems of national education are sometimes discussed in *Java*, a quarterly review published by the Java Institute. Important information is contained in the *Reports* of the educational

conferences held in the Dutch Indies and of the colonial educational congresses held periodically in Holland. Finally, attention is given to education in the various newspapers which have special contributors on the subject.

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INDIA

BY

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EDUCATIONAL COMMISSIONER

WITH THE

GOVERNMENT OF INDIA

INDIA

INTRODUCTION

India consists of nine major provinces (Bengal, Madras, Bombay, United Provinces, the Punjab, Bihar and Orissa, the Central Provinces, Assam, and Burma), and a number of minor provinces and administered areas, such as Delhi, Baluchistan, and Coorg, and the territory ruled by Indian princes which comprises one third of the Indian Peninsula. The organization of education in an Indian state follows closely that adopted in the neighboring British province, but the stage of development reached is not usually as high, except in a few states, such as Baroda, which has a system of compulsory education, and Mysore, which has a university. In the accompanying account the educational systems of the Indian states will not be considered since no general educational statistics are available for these areas.

Excluding state territory British India has an area of 1,091,229 square miles and a population of 247,000,000 people, of whom 127,000,000 are males. The last census returned 19,841,438 males and 2,782,213 females as literate. There are at the present moment 9,316,654 pupils attending schools; of these 1,001,446 are girls.

Historical. — Although a few important educational institutions had been founded in the beginning of the nineteenth century and boards of education had been set up in the three provinces of Bengal, Bombay, and Madras, the organization of public education in British India may be said to date from a despatch of 1854 from the Court of Directors of the East

India Company, who were then responsible for the government of India. In this remarkable document the Directors acknowledged as one of their most sacred duties the diffusion of useful knowledge among the natives of India. Practical suggestions were made for the fulfillment of this aim, such as the creation of a department of education in each province, the use of the grant-in-aid system to encourage indigenous schools, and the establishment of universities. After the Mutiny in 1857 British India was brought directly under the Crown and one of the earliest despatches of the Secretary of State for India in 1858 reviews the educational situation and reaffirms the policy laid down by the Directors of the East India Company.

The whole history of education in India has been profoundly affected by the policy adopted in these early days, more especially by three features of this policy which led to results not anticipated by its authors. These three cardinal features are: (a) the use of the English medium for higher studies; (b) the acceptance of the "filtration" theory which earmarked most of the funds for secondary education; and (c) the adoption of the grant-in-aid system. The decision to encourage Western learning through the medium of English was only reached after years of controversy, the deciding factor being a vigorous minute written by Thomas Babington Macaulay, at that time a member of the Government in Calcutta. The alternatives were either to foster the study of the classical languages (Arabic, Sanskrit, and Persian), the study of which was at that time the only form of higher education recognized in India, or to translate the scientific works of the West into one or other of these languages. The first of these alternatives Macaulay was able to dismiss with the support of enlightened Indian opinion on the ground that it still left India untouched by the light of modern learning; the second presented insuperable difficulties, since the classi-

cal tongues contained no terms to express modern scientific ideas. The claims of the vernaculars to serve as the media of instruction, claims which have been strongly urged in modern times, were then never seriously considered. Not only did the vernacular languages lack modern scientific terms, but they were themselves not standardized, so that difficulty was found in introducing them even into the primary schools.

The Directors did, however, look forward to the time when "as the importance of the vernaculars becomes more appreciated the vernacular literatures will be gradually enriched by the translation of European books or by the original compositions of men whose minds have been imbued with the spirit of European advancement, so that European knowledge may gradually be placed in this manner within the reach of all classes of the people." This, in short, was what was meant by the "filtration" theory. By using the funds allotted for education to meet the most insistent demand, namely, that of the middle-class urban population for English education, it was thought that education would gradually be brought within the reach of the poorer classes. To reach the rural population the system of grant-in-aid was adopted. There were in existence a very large number of indigenous schools, chiefly of a religious character, teaching the Hindu scriptures or the Koran by rote. Government attempted by means of monthly grants to encourage these schools to introduce some modicum of secular instruction.

ADMINISTRATION OF EDUCATION

Educational legislation. — Education in India is singularly unfettered by legislation. Acts were passed in 1858 incorporating the universities of Calcutta, Madras, and Bombay. The Universities of Allahabad and the Punjab were similarly

established toward the close of the century. In 1904 a general act reconstructing the five universities on identical lines was passed during the viceroyalty of Lord Curzon. Although district, *i.e.*, rural, and municipal, boards are empowered by statute to aid and maintain schools, there is no statutory obligation on them to do so. It was not until 1918 that the first Primary Education Act was passed, authorizing the introduction of compulsory primary education by local option in municipal areas in the Bombay Presidency. Other similar acts were passed in Bihar and Orissa, Bengal, and the United Provinces in 1919, and in the same year government measures were passed in the Punjab and the Central Provinces. In the following year Madras passed an act generally similar to those of the other provinces but unlike them in constituting *ad hoc* local education authorities. These acts empower local bodies (in some provinces only municipal boards) to introduce compulsion, subject to the government approval, in any part of the areas under their control. Ordinarily the prescribed limits are from six to ten years, though provision is made for extending the period. The Bombay Government, finding that very little use had been made of the act of 1918, introduced in 1922 an amending act which empowers Government to call upon a local authority to introduce compulsion, if it has not already done so. The effect of these acts will be noted later in dealing with elementary education.

The last ten years have seen the establishment by law of eight new universities. Acts were also passed in the United Provinces and the Central Provinces establishing boards of secondary education, which have taken over from the universities the conduct of the matriculation examination.

Educational administration. — Education in India has always been organized provincially. At the introduction of the reformed constitution, known as the Montagu-Chelms-

ford Reforms, in 1921, education was definitely declared to be a "provincial transferred subject," that is, a subject administered by a minister selected by the Governor of the province from among the elected members of the Provincial Legislative Council and responsible to that Council.

The Central Government or Government of India is responsible for education in the minor areas not included in the provinces, *e.g.*, Delhi, Baluchistan; it has also direct relations with a few central institutions such as the denominational universities of Benares (Hindu) and Aligarh (Mohammedan). In order to counteract the evils of excessive provincialization and to keep local governments in touch with the developments in other provinces the Government of India established in 1921 a central advisory board of education with the personnel drawn from distinguished educators of all provinces. The secretariat of this board was formed by the Bureau of Education, which under the Educational Commissioner with the Government of India performed duties very similar to those performed by the United States Bureau of Education, though on a very much smaller scale. In 1923 in a period of retrenchment the Central Advisory Board of Education and the Bureau of Education were abolished, only the Educational Commissioner being retained on the staff of the central Department of Education. The scrutiny of all new university legislation is one of the few important educational functions still retained by the Government of India.

The provincial Ministers of Education have as their technical advisers the Directors of Public Instruction who are the heads of the Provincial Departments of Education.

Local authorities. — Municipal and district boards are responsible for vernacular and elementary education. Owing to their very limited resources, they are largely dependent on provincial grants for the support of their schools; their

responsibility is thus confined in most cases to the exercise of executive functions, such as the appointment and dismissal of teachers. The initiative in all matters of educational policy comes from the Departments of Education. Local boards have, however, by the recent primary education acts, been given the responsibility for introducing compulsory education by local option, subject to the approval in each case of the Government on whose financial support they must rely.

Educational finance. — The cost of education in the provinces is met from four sources — provincial government funds, local funds, fees, and private sources (*i.e.*, subscriptions and endowments). Government maintains a certain number of colleges and secondary schools, either to set a standard for private institutions or to serve the needs of backward areas where private enterprise is not forthcoming. Professional and technical institutions are also, with few exceptions, directly maintained by Government.

With the growth of private enterprise Government relies more and more on the system of grants-in-aid for the encouragement of secondary education. The great majority of colleges and high schools are under private management, but in receipt of aid from provincial funds. Each province has its own code of regulations for grants-in-aid, the object of the grants being to secure a minimum standard of efficiency. The amount of the grant to any institution is subject to periodical, often annual, revision, being determined partly by the status of the institution, partly by the enrollment, and partly by the efficiency of the staff and instruction as reported by the government inspectors. The average grant to a high school represents approximately one third of the annual cost of maintenance.

The revenues of district boards are chiefly derived from a cess on the land revenue. They are almost stationary and

are incapable of meeting the increasing claims of education. A good district board spends about twenty-five per cent of its net income together with its receipts from school fees on its schools. For its further needs it depends upon annual government contributions. Most municipalities spend much less, relying on private enterprise to provide educational facilities; Bombay is a conspicuous exception.

There has been much discussion in recent years on the system which should govern the distribution of government grants. There is an increasing tendency to adopt a program or contract system: A local body formulates a scheme covering a period of three years for the expansion of education, the improvement of salaries, or the introduction of compulsion, obtains the approval of Government, and a guarantee that provincial funds will meet a certain percentage of the estimated cost. The system has the advantage of enabling Government to fix different ratios according to the financial circumstances of each local body.

The fees paid by an Indian student rarely meet more than a third of the cost of his education; they have not been raised since the War in conformity with the rise of teachers' salaries. Although private sources, in which are included donations, subscriptions, and endowments, meet a not inconsiderable share of the cost of education, the tradition of endowing schools and colleges has not yet taken root in India. Most of the money recorded under the head of private sources represents annual subscriptions collected by school managers, a precarious form of support.

Inspection and supervision. — All colleges and schools in India are divided into two classes, recognized and unrecognized. A recognized school is one which follows a course of study laid down either by a university established by law or by a state department of education, and which is permitted to present candidates for the examinations conducted by the

university or by the department of education. The great majority of unrecognized schools are schools for religious instruction, *e.g.*, Koran schools for Mohammedans. Provincial departments of education exercise a general control over the recognized schools and colleges, although universities enjoy a great degree of autonomy.

Universities undertake the inspection of colleges affiliated with them. The older universities are also nominally responsible for the inspection of the high schools which they recognize, *i.e.*, which they authorize to present pupils for matriculation. Since they have no suitable agency for this purpose, they actually rely for information on the reports of the government inspectors.

All recognized schools are inspected annually by the inspectors, deputy inspectors, or assistant deputy inspectors of the department of education, each grade of officer being immediately responsible for the inspection of high schools, middle schools, and primary schools respectively and also for the supervision of the work of his subordinate inspecting staff. With the exception of a few of the larger municipalities, local boards do not employ any inspecting agency. The position of the deputy or district inspector is one of peculiar importance, as in addition to his departmental duties he acts as the educational adviser and executive officer of his district or municipal board, which delegates to him a certain amount of authority to make appointments and transfers in the teaching staff.

PRESCHOOL AND KINDERGARTEN EDUCATION

There are no separate kindergartens in India. This is largely accounted for by the fact that the customs of the country do not permit women to teach in boys' schools. A pupil may be admitted to a primary school at the age of five years, but Mohammedan boys often join at a later age after a period of instruction in a Koran school.

ELEMENTARY EDUCATION

Compulsory attendance. — There are 168,000 elementary schools in India, containing approximately 7,000,000 pupils. Attendance is extremely irregular and the average school life of a pupil is under four years. Compulsory education has as yet made little headway. The acts authorizing its introduction are of recent date and there is still a vast field for expansion on voluntary lines. Compulsion has been introduced by local option in about 50 municipalities and 150 single school areas. It is as yet little more than compulsion by the pressure of public opinion, since no prosecutions for nonattendance have been instituted in rural areas and very few in urban districts. Except in the city of Bombay girls and certain of the lower classes of the community are everywhere exempt. Little advantage has been taken of the power conferred by the acts to levy special taxes for education.

Provision and organization of schools. — In most of the provinces the original system of aided elementary schools has been superseded by a system of board schools, administered and maintained by district boards with the aid of provincial grants. In a few provinces, notably Bengal and Madras, the more economical but unsatisfactory aided schools under teacher managers still predominate. Although in certain parts small girls attend boys' schools, coeducation is very unpopular with Indian parents and in most of India is practically unknown. The advantages of education for his sons have yet to be brought home to the Indian farmer; there is no demand for the education of girls.

The ordinary primary school in India consists of four or five classes under a single teacher. The difficulty of organizing the work of a school of this kind and the natural tendency of the teacher to concentrate his attention on the more ad-

vanced pupils lead to a deplorable congestion and stagnation in the lower classes. Approximately one half of the 7,000,000 children attending elementary schools are enrolled in the first or infant class. The wastage is also due to the practice of the farmer to withdraw his boy from school as soon as he is old enough to be of use on the land. Children of seven or eight are employed in herding cattle or scaring birds. The custom of early marriage (an orthodox Hindu girl is married before she is twelve years old) and the *purdah* system combine to make the school life of girls even shorter and less productive than that of boys.

Curriculum. — The curriculum is confined to reading, writing, arithmetic, and a little geography; in girls' schools sewing is added. Instruction is entirely in the vernacular through textbooks prescribed by the departments of education. The tendency in recent years has been to simplify the work as much as possible. Attempts to appeal to the agricultural population by the introduction of a rural bias in the schoolbooks or by half-time schools, by which boys are enabled to go home early to work in the fields, have not been successful.

The large municipal elementary schools found in the West do not exist in India. A very large percentage of the town boys attend the preparatory or primary classes of aided high schools, attracted thereto by the early teaching of English, which forms no part of the ordinary elementary-school curriculum.

INTERMEDIATE EDUCATION

Middle schools are of two kinds, middle vernacular and English. The former type exists only in rural districts; it is cheap and really efficient. These schools contain elementary departments and the length of the full course is ordinarily eight years. On its completion many of the boys

join training classes and become teachers in rural schools. Vernacular middle schools are maintained by district boards.

The insistent demand for the teaching of English, which is the vehicle for all higher education, has led to the conversion of many vernacular schools into Anglo-vernacular middle schools, which are high schools without the senior or matriculation classes.

Instruction in the middle schools is conducted through the vernacular, and includes history and geography, arithmetic and practical geometry, a classical language, and elementary science. The classical language may be Persian or Sanskrit and is usually an alternative for science. A recent experiment is the introduction of practical agriculture in the vernacular middle schools.

SECONDARY EDUCATION

There are about 2400 high schools in India with an enrollment of 67,600 pupils. Government, having originally established one high school in nearly every district in India, has in recent years relied on private enterprise for the supply of new high schools. There has been a tendency to multiply schools of this kind in educationally advanced areas. This is more particularly the case in provinces where, as in the Punjab, schools are managed by different religious communities. It is not unusual to find in a Punjab town of 20,000 inhabitants six high schools maintained respectively by Government, a Christian mission, the Sikhs, the Mohammedans, the orthodox Hindus, and the modern Hindu community. The pupils are drawn from the countryside and large hostels form a feature of such institutions.

Bengal, on the other hand, has seen a large crop of proprietary high schools opened within the last decade. Owing to the laxity of the Calcutta University in according recognition, many of these schools are of a most inferior type and

serve to lower the whole standard of secondary education in that Presidency.

The average annual fee in a secondary school is about Rs. 25 or about \$8. High schools contain from ten to twelve classes and take boys from the infant stage up to matriculation, though there is a large influx of pupils from other schools at the middle and high stages. In their elementary and middle departments the curricula prescribed for the elementary and middle English schools are followed; in the high departments the courses leading to matriculation or school final examinations are taught. There has been a tendency to multiply the number of optional subjects taught in the high department — drawing, agriculture, stenography, manual work, bookkeeping, and other subjects being added to the curriculum according to the resources available. Students have, however, shown little inclination to take up subjects which do not qualify for matriculation.

An important commission appointed by Government to inquire into the condition of the Calcutta University, which issued its report in 1919, commented unfavorably on the condition of high schools in the Bengal Presidency and recommended that instruction up to the intermediate arts stage should be counted as preuniversity education and placed under the control of special intermediate and secondary school boards. This recommendation has been adopted by the governments of the United and Central Provinces in both of which boards have been established, while in the former provincial intermediate classes have been added to a number of existing high schools.

VOCATIONAL EDUCATION

Agricultural education. — The staple industry of India is agriculture, an occupation in which 80 per cent of the population are engaged. Indeed much of the labor employed in

industry, for example in coal mines, is drawn from agriculture and is ready at any time to revert to it. Attempts to improve Indian agriculture by education have hitherto not proved very successful. There are five agricultural colleges in India, maintained by Government and attended by about 1000 students. These colleges are affiliated with the provincial universities and prepare their students for a degree in agriculture.

To bring education in agriculture nearer to the Indian peasant various types of schools and classes have been started, but they do not, as a rule, attract the brighter scholars. The son of an Indian farmer who seeks education does so in order to escape from the land and manual labor; if he enters a special agricultural middle school, he cuts himself off from higher education. The most successful experiments have been those that have combined agriculture with general subjects in the curriculum of the ordinary public school. The danger that school agriculture may become a purely theoretical or book subject has been avoided in the Punjab by attaching three-acre farms to a number of middle vernacular schools, the courses in which still permit the pupils to proceed to a high school and college. Some of these farms are now reported to be self-supporting, and the system is being copied in other provinces.

Technical education. — In recent years there has been a constant and insistent demand for more vocational and technical education. This demand has arisen rather from a desire for employment than from a desire for education. The old fallacy that education creates industry is still in evidence. The need of a suitable environment for an industrial school is not sufficiently realized. Experiments have been made with the introduction of vocational subjects in the curricula of high schools, but they have met with little success, owing partly to the disinclination of secondary-school

boys to cut themselves off from the hope of a college career. An exception must be made in favor of clerical and commercial subjects, such as shorthand and typewriting, which attract an increasing number of students.

A certain number of large technical institutions are flourishing in industrial centers; as, for example, the Sydenham College of Commerce in Bombay, the Technological Institute at Cawnpore, and the Technical Institute at Jamshedpur, the seat of the iron industry. There are also a good many small craft or trade schools dealing with local industries, *e.g.*, weaving. The number of technical institutes, 556, is, however, small, when compared with those for general education.

TEACHERS

Training of elementary-school teachers. — In no feature do the provincial systems of education differ more widely than in the importance that they attach to the professional qualifications of their teachers. Except in the United Provinces, where rural boards are responsible for training elementary-school teachers, the preparation of teachers of all grades in India is undertaken almost entirely by government. Tuition fees are not charged and teachers under training receive stipends for their maintenance varying in value from Rs. 7 a month to an elementary teacher in Bengal to Rs. 40 a month to a secondary-school teacher in Bombay.

In provinces such as Bengal, where the primary education system is based on private aided schools, the qualifications of elementary-school teachers are often very low. In Bengal out of 60,174 teachers 15,192 do not themselves possess more than elementary-school qualifications. For such teachers a course of training means nothing more than an attempt to supplement the deficiencies of their general education. In provinces such as the Punjab, where the primary system is based on the publicly managed board school, teachers with

higher qualifications are employed. A certificated teacher is required to have passed the vernacular middle examination and to have undergone one year of training at a normal school, a well-found and well-staffed institution.

In the United Provinces alone small training classes of seven or eight teachers are attached to board middle schools, a system that is fortunately unique in India. The course of training is almost invariably one year in length. The need for trained teachers is so great that few provinces can afford to restrict their output by keeping the teachers under training for two years. In every normal school and training class due emphasis is laid on the work of teaching, though this is often confined to the somewhat artificial atmosphere of the model or practicing school.

Training of secondary-school teachers. — Secondary work in the vernacular, *e.g.*, in middle schools, is intrusted to teachers who have either been trained in special normal schools or who after qualifying as elementary-school teachers have undergone a further year of training. The training of Anglo-vernacular teachers, *i.e.*, teachers qualified to teach English or general subjects through the medium of English, falls naturally into two sections: (*a*) the preparation of undergraduates for a diploma or certificate in teaching; and (*b*) the preparation of graduates for a degree in education. In some provinces no provision exists for training the former class of teachers, with the result that much of the early work in English is intrusted to untrained men. For graduates there are twenty-two training colleges in India. These colleges are affiliated with the local universities and prepare for the B.T. or L.T. degrees. The course is for one year after graduation in arts or science.

Salaries and status of teachers. — Teachers in government schools are in pensionable employ and draw rates of salary in accordance with their appointments. A vernacular teacher

draws about Rs. 50 a month, a trained graduate from Rs. 75 to Rs. 300, or even more, a month. Pension is admissible at the age of fifty-five, though service may be extended to sixty.

Teachers in aided secondary schools draw a lower rate of salary, which differs greatly in the different provinces. A graduate in Bengal is obtainable for Rs. 30 or Rs. 40 a month ; in the Punjab he would expect from Rs. 60 to Rs. 80 a month. Local governments have been active in promoting the introduction of provident funds for teachers in aided schools, guaranteeing to contribute an amount equal to the contribution made by the managers. There is too little certainty in the tenure of appointments in aided schools, and changes in the teaching staffs are very frequent.

The salaries of teachers in board service have almost doubled since the War, certificated elementary teachers drawing from Rs. 20 to Rs. 40 a month with membership in the board's provident fund. On the other hand, the pay of teachers in aided schools is probably the lowest in the world ; thousands of such teachers draw from Rs. 3 to Rs. 6 a month, together with such income, if any, as they can make in fees or in kind from the parents of their pupils. In many small villages the teachers act as postmasters, for which service they draw small allowances from the Postal Department of Rs. 3 or Rs. 5.

MEDICAL AND PHYSICAL WELFARE

Several provinces have attempted to organize medical inspection for the pupils in the secondary schools, but the huge numbers involved and the cost entailed have prevented the introduction of any complete system.

Physical exercises are included in the curriculum of most Indian schools. In this sphere of educational work much credit is due to young American graduates of the Young Men's Christian Association, to whom the local govern-

ments in several of the major provinces, *e.g.*, Punjab, have intrusted the work of organization and instruction. It is due to the activities of this society that India has been represented at the last two Olympic contests. When encouraged to do so and when playgrounds are available, the Indian student plays games with keenness and skill; he is particularly proficient in gymnastics, hockey, and tennis. The Boy Scout movement has been introduced in the last decade and has met with remarkable success.

UNIVERSITY EDUCATION

One of the most remarkable features of Indian education is the large percentage of boys who proceed to the universities; of the total number of Indians receiving some education 0.69 per cent attend the universities. In 1924 out of 63,446 candidates who presented themselves for the matriculation or the equivalent-schools' final examination 45,445 were successful; the figures for the Calcutta University alone were 18,252 candidates and 13,298 passes.

Five universities had been established by 1886. These were all of the affiliating type and for thirty years thereafter the increasing demand for university education was met by an increase in the number of colleges affiliated with these five universities. By 1916 the process of inflation had reached such a stage that the universities had become unmanageable. It was at this time that the Calcutta University Commission was appointed, which recommended the immediate establishment of a unitary university at Dacca and the creation of similar universities at other large centers of collegiate education. By 1924 no less than ten additional universities had been incorporated, two of them in Indian states, Mysore and Hyderabad. Several of the older universities took this opportunity to overhaul their administrative machinery. The new and revised university constitutions

provide for the creation of academic councils to deal with purely academic matters such as courses and examinations. They also include a large elective element in the senates and courts of the universities.

There are eight affiliating universities, at Calcutta, Mādras, Bombay, Allahabad, Lahore, Patna, Nagpur, and Mysore, and seven teaching universities, at Benares, Aligarh, Lucknow, Delhi, Dacca, Rangoon, and Hyderabad. In the latter the teaching is all conducted at a single center either in local colleges or by the university itself.

The ordinary course for a degree is four years in length, divided into two parts, students being required to pass an intermediate examination at the end of the first two years of the course. In accordance with the recommendations of the Calcutta University Commission the acts incorporating the new or reconstituted universities at Allahabad, Lucknow, Dacca, Delhi, Aligarh, and Nagpur have provided for raising the standards of admission to the universities to the intermediate examination, after a period during which the colleges and schools are to adapt themselves to the new conditions. At Allahabad and Delhi this period will elapse in 1927, and already a strong body of opinion has shown itself hostile to the proposed change. Among the most influential of the critics are the governors and principals of colleges. The former can ill afford to lose the income from the fees of the intermediate students, who constitute the bulk of the undergraduate population, while the principals do not consider two years a sufficient time for the colleges to make any lasting intellectual or moral impression on their students. The Commission undoubtedly contemplated the extension of the postintermediate course to three years, but for this extension of the ordinary educational course, in Indian opinion, is not prepared; "honors" courses of three years have, however, been introduced in several universities.

All university teaching, except at Hyderabad, is conducted in English, the only common medium. It is chiefly owing to the defective knowledge of English possessed by the first-year students, which has led to cramming and memorizing of textbooks imperfectly understood, that the postponement of the stage of admission was recommended by the Commission. Although most universities have abolished any minimum age limit for matriculation, most students do not matriculate until they are seventeen, a fact which seems to point to faulty methods of teaching languages in the secondary schools as the cause of the deficiency in English.

Advanced studies. — For advanced studies Indian students go abroad to Great Britain or to the United States. In 1924 there were some 1200 students in Great Britain; the number in the United States is not known. Nearly half of the students in England are studying law, since a barrister who has been called to the English bar enjoys a higher status in the Indian court than one who has only Indian qualifications.

Efforts are now being made to raise the standard of teaching in the larger professional schools in India so as to obviate the need for study abroad. The qualifications of graduates of the four Indian medical colleges are recognized by the British Medical Council, and the standard of teaching in the engineering colleges has been much improved. To obtain a degree of bachelor of engineering a student must pass through a four-year course at an engineering college after having taken the intermediate examination at an arts college; after his professional course he must give proof of a year's satisfactory work with an approved firm.

The pressure on the law colleges of India is enormous, the number of students having risen from 6089 to 7351 in the last five years. During the last three years there has been a similar influx of students into the medical colleges.

CURRENT PROBLEMS

The problems in Indian education are so numerous and many of them are still so far from solution that there is only space to mention those which are either peculiar to India or insistent at the present time.

(1) The Language Problem. — There are over one hundred and forty vernaculars in India, many of them with a very restricted vocabulary. While even the mother languages may be and are used as the medium of instruction in local primary schools, pupils must early be provided with some medium capable of introducing them to a wider culture. The more important vernaculars such as Hindi, Urdu, and Bengali, though spoken over wide areas or by large communities (Hindi by the Hindus of the North, Urdu by the Mohammedans, and Bengali in Bengal), by no means provide a vehicle for general use in the schools even of a single province.

Several universities have recently resolved to accept answers at matriculation in the vernacular, though the question papers are set in English ; but this concession means that some method must be devised for marking answers written, in the case of Patna, for example, in six different languages.

The use of English as the medium in the universities provides a solution for this problem in the highest stage of education ; but the stages at which English should be introduced, (1) as a second language and (2) as a medium of instruction, have not yet been satisfactorily determined.

(2) The question whether university education should begin at the present matriculation stage or be postponed till the intermediate, which has been mentioned in the section on university education.

(3) All stages of education in India have their own examination problems. The most serious is that of the high schools ; in some provinces both the matriculation examina-

tion conducted by the universities and the schools' final examination conducted by the departments of education or the secondary education boards are held. The latter is the more modern type of examination, account being taken of the school work of the candidates; but there is a strong popular prejudice in favor of the purely written external examination. The point at issue is more than a mere question of examinations, since the control of these involves the power of recognizing high schools and of prescribing their curricula.

(4) The problem of illiteracy is of supreme importance. It can only be solved by the encouragement of the demand for education among the rural population, and by the gradual introduction of compulsion. This must be accompanied by an improvement in the organization and teaching of the single-teacher school.

(5) To overcome the indifference, often amounting to dislike, of the Indian population to the education of girls is a task before the educator.

(6) The provision of schools for special communities, *e.g.*, the European and the Anglo-Indian population, Mohammedans, and depressed classes. A whole system of European schools exists throughout India quite distinct from the ordinary school system; and in several provinces separate arrangements have to be made for other communities, which are by language or social usage debarred from the use of the ordinary public schools.

STATISTICS

TEACHERS			
Kind of school	Trained	Untrained	Total
In elementary schools	115,296	152,991	268,287
In intermediate schools	20,383	16,698	37,081
In secondary schools	14,135	21,029	35,164

N.B. No separate returns for men and women recorded.

GENERAL SUMMARY OF EDUCATIONAL INSTITUTIONS AND SCHOLARS

PERCENTAGE OF SCHOLARS TO TOTAL POPULATIONS					
Area in square miles Population —	—	Recognized Institutions		All Institutions	
		1924	1923	1924	1923
Males	1,092,638				
Females	126,919,836				
Total	120,187,505				
	247,107,341	Males	5.71	5.36	5.80
		Females	1.19	1.14	1.21
		Total	3.51	3.31	3.48

INSTITUTIONS				SCHOLARS		Percentage of Each Class of Institution
RECOGNIZED INSTITUTIONS	1924	1923	Increase (+) or Decrease (—)	1924	1923	
<i>For Males</i>						
Arts Colleges	156	160	—4	55,051	(c) 50,816	0.74
Professional Colleges	59	52	+7	15,935	(c) 14,072	0.21
High Schools	2,187	2,082	+105	636,178	592,582	8.20
Middle Schools	6,332	6,108	+224	677,942	631,591	8.77
Primary Schools	144,430	139,095	+5,335	6,137,587	5,812,306	79.40
Special Schools	6,330	5,447	+883	207,260	171,319	2.68
Totals	159,494	152,944	+6,550	7,729,953	7,272,686	100
<i>For Females</i>						
Arts Colleges	14	14	—	1,103	1,062	0.12
Professional Colleges	8	7	+1	(a) 184	(b) 186	0.02
High Schools	237	230	+7	42,216	39,416	4.47
Middle Schools	648	624	+24	72,416	67,816	7.67
Primary Schools	23,583	22,920	+663	818,047	787,810	86.65
Special Schools	287	273	+14	10,084	9,999	1.07
Totals	24,777	24,068	+709	944,050	906,289	100
UNRECOGNIZED INSTITUTIONS						
<i>For Males</i>						
For Females	32,197	31,418	+779	585,235	560,353	—
Totals	2,663	2,242	+421	57,416	51,762	—
Grand Totals	34,860	33,690	+1,200	642,651	612,115	—
	219,131	210,672	+8,459	9,316,654	8,791,090	—

NOTE. — There are also 13 Universities in British India which are not shown separately in this table.

(a) Includes 35 scholars for Arts Colleges in Delhi.

(b) Includes 33 scholars for Arts Colleges in Delhi.

(c) Revised.

GENERAL SUMMARY OF EXPENDITURE ON EDUCATION

(Rs. 3 = \$1 appr.)

(¹ Includes expenditure on buildings.)

	TOTAL EXPENDITURE		PERCENTAGE OF EX-PENDITURE FROM					COST PER SCHOLAR TO				Total Cost per Scholar
	1923	1924	Increase (+) or Decrease (-)	Govt. Funds	Board Funds	Fees	Other Sources	Govt. Funds	Board Funds	Fees	Other Sources	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. AS. P.
Direction and Inspection	94,43,391	93,42,751	+1,00,640	97.3	2.7	—	—	—	—	—	—	—
Universities	77,59,557	67,79,360	+9,80,197	47.2	—	37.2	15.6	—	—	—	—	—
Miscellaneous ¹	3,97,79,972	3,83,98,654	+13,81,318	40.2	12.0	15.7	32.1	—	—	—	—	—
Totals . .	5,69,82,920	5,45,20,765	+24,62,155	50.6	8.8	16.0	21.6	—	—	—	—	—
<i>For Males</i>												
Arts Colleges	96,96,965	96,08,130	+88,835	44.8	0.3	42.3	12.6	86 13 5	0 10 6	81 15 4	24 7 2	193 14 5
Professional Colleges	55,34,275	53,77,513	+1,56,762	74.3	0.2	22.8	2.7	257 15 0	0 12 10	79 3 0	9 6 0	347 4 10
High Schools	3,27,91,153	3,03,97,113	+23,94,040	32.9	2.2	51.2	13.7	16 4 10	1 1 7	25 5 3	6 12 4	49 8 0
Middle "	1,48,60,274	1,43,25,303	+5,34,971	36.9	22.0	28.4	12.7	8 1 6	4 13 3	6 3 4	2 12 8	21 14 9
Primary "	4,80,37,749	4,57,77,553	+22,60,196	55.0	25.7	9.8	9.5	4 4 10	2 0 3	0 12 3	0 11 11	7 13 3
Special "	1,25,99,158	1,29,98,142	-3,98,984	70.0	5.0	7.3	17.7	42 8 4	3 1 1	4 6 9	10 12 5	60 12 8
Totals . .	12,35,19,574	11,84,83,754	+50,35,820	48.7	13.8	25.8	11.7	7 12 6	2 3 3	4 1 11	1 14 1	15 15 8
<i>For Females</i>												
Arts Colleges	4,09,739	3,54,215	+55,524	58.4	—	13.1	28.5	238 11 10	—	53 10 9	116 11 0	409 1 7
Professional Colleges	2,10,772	1,89,282	+21,490	73.8	—	1.4	24.8	1,044 5 6	—	20 2 7	350 1 2	1,414, 9 3
High Schools	48,06,185	44,11,407	+3,94,778	45.9	1.6	31.6	20.9	51 9 3	1 12 1	35 8 7	23 8 2	112 6 1
Middle "	29,30,785	28,14,923	+1,15,862	40.1	12.0	13.6	34.3	26 3 7	4 13 11	5 7 11	13 14 1	40 7 7
Primary "	85,07,081	79,64,967	+5,42,114	41.4	37.3	3.9	17.4	4 4 11	3 14 0	0 6 5	1 13 0	10 6 5
Special "	17,44,135	16,64,723	+79,412	69.5	2.4	4.4	23.7	120 3 5	4 1 3	7 10 7	41 0 1	172 15 4
Totals . .	1,86,08,697	1,73,99,517	+12,09,180	45.8	19.6	12.7	21.9	9 0 5	3 13 8	2 8 2	4 5 2	19 11 5
Grand Totals	19,91,11,191	19,04,04,036	+87,07,155	48.9	12.9	21.8	16.4	10 7 5	2 12 1	4 10 5	3 8 0	21 5 11

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JAPAN

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JAPAN

INTRODUCTION

The Japanese Empire consists of five principal islands: Honshiu, Kiushiu, Shikoku, Hokkaido, and Taiwan (Formosa), a large number of small islands, the peninsula of Chosen (Korea), and part of the island of Karafuto (Sakhalin). These territories cover an area of 260,738 square miles. The estimated population of the Mainland (Honshiu) at the end of 1923 was 80,704,800.

The modern spirit in Japan. — Modern Japan is not desirous of securing the benefits of western civilization by mere imitation, nor is she attempting to introduce a utilitarian civilization merely to supplement her own weak points with the strong points of the western world. Rather is Japan making a strong effort to understand human nature in the light of her own ancient culture. The tendency in the modern world is to progress by an amalgamation of different cultures in order that present civilization may be greater, richer, and more solid. By emphasizing the cultural characteristics of her race, Japan hopes to make a contribution to the progress of world civilization.

Hence it is felt that the foundation of Japan's natural existence is not founded merely on the enrichment and improvement of material prosperity but must be firmly rooted in her culture. Imperialism or militarism is hateful, at least to the younger generation of Japanese; hence Japan is embracing liberalism, a principle which understands and respects other cultures and coöperates with them for the advancement of the progress of humanity.

Tendencies in educational philosophy. — There has never been a period of such keen and serious study of the problems of education as the present. Japan's position after the War stimulated the study of philosophy and religion, fields in which she has many eminent leaders. But this interest in philosophy is not merely speculative; it is a strenuous effort to find a principle in the diverse and complicated phenomena in education, an effort to discover something that will inspire the teachers with confidence and courage.

Generally speaking, the Japanese love activity and highly value progress. The static philosophy of Buddha was reconstructed by them into a dynamic religion of practical life; in the Tokugawa period it was the Japanese philosophers who started a great movement for the revival of Confucianism as a pragmatic, ethical doctrine which had once degenerated into lifeless teaching in the hands of the Chinese philosophers of the middle ages. In the same way in the study of educational philosophy at present an attempt is being made to discover its dynamic principles; its central problem is the study of the essential meaning of education.

Professor Shinohara, Tokio Imperial University, thinks that education is a "rationalization of nature"; Professor Tsuji, Hiroshima Teachers College, regards it as "an effort to eternalize value"; and Dr. Ito interprets it as "a development of cultural will." These examples indicate the attitude of students of education; it is generally understood among them that education is a voluntary and wholehearted activity for human nature and grows out of human nature itself.

The second interest in educational philosophy is to unify liberalism and realism. This has stimulated the profound study of writers like Dewey, Natorp, Litt, Spranger, and others. But a remarkable change has taken place in the attitude of Japanese students. Formerly they read the

words of western scholars with childish devotion, as if they contained the ultimate truths; or else they tried to find a panacea in ready-made theory for their own practical everyday needs. To-day the students attempt to discover how the theory emerged from the authors' experience and then examine how such a theory deepens their own experience, how it molds life, and what light it throws upon the actual problems of education. Study is thus concentrated not on imitation but on a critical investigation of the real character of human nature.

Tendencies in the study of education. — In the study of the science of education there has also been a shift in the central interest. Formerly the aim was to discover how to bring the varied aspects of education into unity. Works like *Keitoteki Kyoikugaku* (*Systematic Pedagogy*) by Professor Yoshida, *Gakko Kyoiku* (*School Education*) by Professor Konishi, and *Shinsen Kyoikugaku* (*New Pedagogy*) by Professor Ose show the tendencies of this period. But Professor Otatake's *Jikken Kyoikugaku* (*Experimental Pedagogy*) directed the attention of scholars to more exact studies based on special points of view. As examples may be cited Professor Nakajima's *Jinkakuteki Kyoikugaku* (*Pedagogy of Personality*) and Professor Sasaki's *Kyoikuteki Bigaku* (*Pedagogical Aesthetics*).

This tendency which has been in existence for more than ten years has now reached a turning point, and the center of study has become more specialized and more practical. Taking up concrete educational activities, the aim is to study them objectively and scientifically. Examples of this new point of view are *Jidoken Kyusho Kiyo* (*Child Study Record*, in 6 volumes) and *Jikkenteki Kyoikugaku Kogi* (*Experimental Pedagogy*) by Professor Kabo and *Senbatsuho Gairon* (*Methods of Selection*) by Professor Narasaki. These scholars with Dr. Tanaka are leading students of mental tests and

educational measurements. To these may be added *Kyoiku Sokutei* (*Educational Measurement*) by Dr. Okabe and *Seishin Kensaho* (*Methods of Mental Tests*). Mr. Kido in his *Bunka to Kosei to Kyoiku* (*Culture, Personality, and Education*) is attempting to supplement the study of educational philosophy with the help of experimental pedagogy.

The study of the history of education is not yet far advanced. Books like those of Monroe and Davidson have been translated and a number of books in the history of western education have been written by native scholars, but only a beginning has been made in this study of the history of Japanese education. Under the leadership of Professors Konishi, Haruyama, and Otatoke the development of this field of research is another evidence of the new spirit of cultural independence in Japan.

ADMINISTRATION OF EDUCATION

Central authority. — The administration and general supervision of education are in the hands of the Department of Education, at the head of which is the Minister of Education. The supervision of this office extends to literature, arts, and religion as well as to education. The Minister of Education is assisted by a Vice-Minister and for educational purposes by directors of bureaus: general education, special education, technical education, and textbooks. It supervises directly the heads of universities, of other schools and libraries established by the Government, public and private universities, and higher schools. Through the prefectural governors he controls all public and private schools, kindergartens, and libraries of the prefectures. A number of advisory committees, including official and lay members, have been established for purposes of consultation.

In general education is under the control of the national Government, which requires the establishment and main-

tenance by local authorities of certain types of schools such as elementary schools, normal schools, middle schools, and high schools for girls. Such matters as the nature and purpose of different schools, courses of study, organization, entrance requirements, qualifications of teachers, equipment and expenditure, tuition fees, and so on, are prescribed by Imperial ordinances. The establishment of public as well as of private schools must be approved by the supervising authorities.

It is the administrative policy of the Government to keep the greater part of educational matters under the control of the central authority in order to secure a uniform development of national education.

Local authorities. — The local authorities concerned with the administration of education are the prefectures, of which there are three urban prefectures or *Fu*, and forty ordinary prefectures or *Ken*, each under a governor; the municipalities under mayors; and the villages under headmen. In each prefecture there is a department of internal affairs which has charge of educational matters in its area. The prefectures in towns are divided into districts under district administrators to whom the mayors and headmen are subordinated. Finally, the mayors and headmen are intrusted with the administration of the affairs of their areas, including elementary education, for which they are assisted by school boards.

Inspection and supervision. — The Department of Education maintains a staff of inspectors and supervisors of education; textbook supervisors who compile and examine textbooks; and school-health supervisors responsible for the supervision of hygienic conditions in the schools. The prefectural governments also maintain inspectors and assistant inspectors, while the districts into which prefectures are divided also have their own inspectors. The last two types

of inspectors have administrative as well as supervisory functions.

Educational finance. — The cost of maintenance of education is divided between the national Government, the prefectures, districts, cities, and towns and villages. Thus the burden for elementary education which constitutes the largest item in educational expenditure was divided in the following proportion in 1923: national treasury, 22.76 per cent; prefectures, 17.94 per cent; cities, 15.13 per cent; and towns and villages, 44.17 per cent.

PRESCHOOL AND KINDERGARTEN EDUCATION

The provision of kindergartens, which were formerly mainly in private hands, has been undertaken by the public authorities. The kindergarten is an institution in which infants may innocently enjoy their period of childhood; it is not too much inclined to Froebel, nor does it adhere too closely to Montessori; as a preschool it enjoys considerable liberty. The necessity and value of the kindergarten are now well understood by the masses and in the near future a regulation will be issued governing this type of school, which promises to occupy an important place in the national system.

The following table gives some figures on the kindergartens in 1923:

	GOVERNMENT	PUBLIC	PRIVATE	TOTAL
Kindergartens	2	268	477	747
Nurses	13	957	1,276	2,246
Pupils: Boys	172	17,390	17,040	34,602
Girls	162	15,349	14,981	30,492
Total	334	32,739	32,021	65,094

ELEMENTARY EDUCATION

Elementary schools are divided into two classes: the ordinary, which give the six years of compulsory education, and the higher, which give a two- or three-year course beyond that of the ordinary elementary school. The curriculum and time schedule of the ordinary elementary school are as follows:

	Years	1	2	3	4	5	6
Morals		2	2	2	2	2	2
Japanese language		10	12	12	12	9	9
Arithmetic		5	5	6	6	4	4
Japanese history		—	—	—	—	2	2
Geography		—	—	—	—	2	2
Science		—	—	—	2	2	2
Drawing		—	—	1	1	2 ¹	2 ¹
Singing		—	—	1	1	2	2
Physical exercises		4	4	3	3	3	3
Sewing (girls)		—	—	—	2	3	3
Total — Boys		21	23	25	27	28	28
Girls		21	23	25	29	30	30

¹ Girls have one hour of drawing only

The following table gives the curriculum and time schedule of the higher elementary school:

	Years	Two-Year Course		Three-Year Course		
		1	2	1	2	3
Morals		2	2	2	2	2
Japanese language		8	8	8	8	8
Arithmetic		4	4	4	4	4
Japanese history		2	2	2	2	2
Geography		2	2	2	2	2
Science		2	2	2	2	2
Singing		1	1	1	1	1
Physical exercises		3	3	3	3	3
Sewing (girls)		4	4	4	4	4
Total — Boys		24	24	24	24	24
Girls		28	28	28	28	28

Manual training, commerce, domestic science, drawing, foreign languages, or some other subjects may be added to the course up to six hours extra for boys and up to four for girls. Both the ordinary and higher elementary courses may be offered in the same school. Further, a course of not more than two years may be added to each type of school and constitutes what is known as a continuation school.

Tendencies in elementary education. — The old practice of looking upon the child as an immature being on whom is to be imposed the preparation necessary for adult life is gradually yielding before the aim of developing self-conscious personality. Those concerned with leadership in elementary education believe that the child has power to create and to educate himself just as much as the adult. The aim of the teacher should be to lead his pupils to develop their experiences from within and to organize those experiences by their own self-activity and efforts. The function of the teacher is to create an environment in and through which the children develop themselves.

Centers of new developments and experiments along these lines are to be found in the Nara Women Teachers College, in the Chiba Normal School, in the Japan Women's University, and in the work of Professor Higuchi. When the Dalton Plan was introduced two years ago in the Seijo elementary school, it at once attracted attention. The project method was strongly advocated by the Tokyo Women Teachers' College and soon found many disciples. At present attention is being given to the Winnetka Plan.

These foreign methods came at the psychological time in response to the fundamental demand among Japanese educators that children be made the starting point in the organization of educational methods, using their own experiences and relying on their own efforts and natural endowment. The

difficulty arises, however, in the interpretation of the child's inner life. Some would emphasize the artistic side and never has so much value been attached to fairy tales and school plays. Others see the real character of child life in physical activities and give the first place to games, sports, excursions, and open-air country activities. Excursions are now made once a month or once a term in most elementary schools, while in some cases, especially for city children, classes are held in the woods and at the seaside; sketching, science work, and geography lessons in the open air are becoming common. There is still another group that professes to have found the real significance of child life in their religious experience, and emphasizes the human and spiritual aspects of knowledge alone.

SECONDARY EDUCATION

Middle schools for boys. — Secondary education is given in the middle school for boys and in the girls' high schools. The course in the middle schools lasts five years and is open to boys who have completed the ordinary elementary school, or are twelve years of age and have passed an entrance examination. The number of middle schools has grown rapidly in the last few years, but not enough to cope with the rapid increase in the number of applicants. In 1922 there were about 156,000 applicants for admission to middle schools, of whom only some 63,000 were accepted; in the girls' high schools there were over 143,000 applicants and 71,000 admissions. The result is that an excessive strain is placed on the pupils in the upper classes of the elementary schools who plan to continue in a secondary school. The improvement of the methods of selection and the establishment of new schools are pressing problems of the moment.

The curriculum and time distribution of the course in middle schools are as follows :

	Years	1	2	3	4	5
Morals		1	1	1	1	1
Japanese language and Chinese classics		8	8	6	5	5
Foreign languages		6	7	7	5	5
History and geography		3	3	3	3	3
Mathematics		4	4	5	4	4
Natural history		2	2	2	2	—
Physics and chemistry		—	—	2	4	4
Elementary law and economics		—	—	—	—	2
Industry		—	—	—	2	2
Drawing		1	1	1	1	1
Singing		1	1	—	—	—
Physical exercises		3	3	3	3	3
Total		29	30	30	30	30

Middle-school problems. — The most important problem of the middle school at present is concerned with the fourth and fifth years. By an anomaly boys who complete the fourth year have the same privilege as those who complete the fifth year to take entrance examinations to the universities. The result is that almost all, bright or dull, plan to enter the higher institutions after the fourth year, with many failures as a consequence. The question that is being considered, therefore, is whether the fifth year should be dropped entirely or whether the entrance qualifications should be limited to graduation from the fifth year.

There is in secondary education the same tendency as was found in elementary — to recognize in secondary education an end in itself. For although secondary education is a continuation of elementary and a step toward higher education, it does not exist merely as a preparatory school. Hence its object should be the enrichment and refinement of human nature as it develops in the adolescent period; its chief aim should be the cultivation of character.

Girls' high schools. — These schools are more flexible than those for boys and are adapted to local circumstances. The

courses are of four or five years' duration for girls who have completed the ordinary elementary school and three years for those who have completed the higher elementary school. Further, special courses are also offered in household management or in literature in the girls' real high schools, lasting four, three, or two years, according to previous preparation of the students. The old notion that the girl is to be educated to be a woman in the home, to be a good wife and a wise mother, is being supplemented, if not replaced, by the same tendencies that are found in boys' schools.

The curriculum and time distribution in the courses of the girls' high schools are as follows :

	Years	FIVE-YEAR COURSE					FOUR-YEAR COURSE				THREE-YEAR COURSE		
		1	2	3	4	5	1	2	3	4	1	2	3
Morals		2	2	2	1	1	2	2	1	1	2	2	1
Japanese language		6	6	6	5	5	6	6	5	5	5	5	5
Foreign languages		3	3	3	3	3	3	3	3	3	3	3	3
History and geography		3	3	2	2	2	3	3	2	2	2	2	2
Mathematics		2	2	3	3	3	2	2	3	3	2	2	2
Science		2	2	3	3	3	2	2	3	3	3	3	3
Drawing		1	1	1	1	—	1	1	1	—	2	1	—
Household management		—	—	—	2	4	—	—	2	4	—	2	4
Sewing		4	4	4	4	4	4	4	4	4	4	4	4
Music		2	2	1	1	—	2	2	1	—	2	1	1
Physical exercises		3	3	3	3	3	3	3	3	3	3	3	3
Total		28	28	28	28	28	28	28	28	28	28	28	28

NOTE: The foreign language may be either English or French. Pupils may omit the foreign language, drawing or music, and may substitute other subjects. According to local circumstances education, elements of law and economics, manual work, technical courses, or other subjects may be added to the list of subjects offered by a school and additional hours may be provided for them. The length of the course for graduation depends on the preparation of pupils before admission to the high schools. Supplementary and post-graduate courses may be organized in these schools.

In the girls' real high schools the following curriculum and time distribution are found :

		FOUR-YEAR COURSE				THREE-YEAR COURSE			TWO-YEAR COURSE	
	Years	1	2	3	4	1	2	3	1	2
Morals		2	2	1	1	2	1	1	1	1
Japanese language		6	6	5	5	6	4	4	4	4
History and geography		2	2	2	—	2	2	—	—	—
Mathematics		2	2	2	3	2	2	2	2	2
Science and household management		3	3	3	4	3	4	4	4	4
Sewing		8	8	8	8	8	8	10	10	10
Drawing		1	1	1	—	1	1	—	1	—
Music		1	1	1	—	1	1	—	1	—
Technical course		—	—	2	4	—	2	4	2	4
Physical exercises		3	3	3	3	3	3	3	3	3
Total		28	28	28	28	28	28	28	28	28

NOTE: Science is not given in the two-year course. Drawing, music, and the technical course may be omitted. According to local circumstances the following subjects among others may be added: education, elementary law and economics, and manual training. All other regulations concerning the curriculum are similar to those of the regular course in the girls' high schools.

TEACHERS

Training of elementary-school teachers. — The system of training teachers was reorganized in 1925 when a five-year course was introduced in the normal schools in place of the one-year preparatory and four-year training course. In 1926 a postgraduate course of one year will be added. In order to put the new plan into effect the Department of Education is intending to give aid amounting to 4,000,000 yen annually. In 1922 there were 94 normal schools with 28,932 students.

The curriculum and time distribution of the normal-school course for boys are as follows :

	Years	1	2	3	4	5
Morals		1	1	2	2	2
Education		—	—	2	3	5
Japanese language and Chinese classics		6	6	4	5	5
English		5	3	3	3	3
History		2	2	3	3	2
Geography		2	2			
Mathematics		4	4	4	3	3
Natural history		2	2	2	1	—
Physics and chemistry		—	3	3	3	3
Elementary law and economics		—	—	—	2	2
Agriculture and commerce		—	—	2	2	2
Penmanship		2	1	1	—	—
Drawing and manual training		3	3	2	2	2
Music		2	2	1	1	1
Gymnastics		5	5	5	4	4
Total		34	34	34	34	34

The curriculum in the normal schools for girls is almost identical, except that English, agriculture, and commerce are optional, and household management and sewing are added.

Training of secondary-school teachers. — The principal institutions for training secondary-school teachers are the higher normal schools, which offer a four-year course, of which the first year is preparatory. These higher normal schools have three departments: literature, science, and physical education. In response to a general demand to raise all the higher normal schools to university rank the Department of Education has promoted the Tokyo and Hiroshima Normal Schools to universities, a measure that has been approved by the Imperial Diet. In 1923 there were 11 institutions engaged in the preparation of teachers for secondary schools, including 2 higher normal schools with 1375 students; 2 Women's Higher Normal Schools with 766 students; 5 special institutions with 200 students; the Tokyo Fine Arts School with 65 students; and the Tokyo Academy of Music with 84 students.

There were besides 1 institution for training teachers of agriculture with 43 students in 1922; 1 for training technical-school teachers with 137 students; and 1 for training commercial-school teachers with 88 students.

Training in service. — Provision is made in universities and other institutions for higher education for research work by teachers. For teachers, both elementary and secondary, in the provinces short-term courses during the summer and winter vacations are organized by the central and local governments; local educational associations also provide lecture courses. Teachers who attend courses of this type are paid their traveling expenses or receive special allowances to encourage attendance. In 1922 the 3282 courses were attended by 362,407 teachers.

A number of traveling scholarships (80 in 1922) for purposes of study abroad are also available for teachers.

Salaries of teachers. — The following table gives the maximum and average salaries of teachers of all grades:

SCHOOL TEACHERS	MAXIMUM	AVERAGE
	Yen ¹	Yen ¹
Elementary	2160	702
Middle	3100	1397
High schools for girls	3100	1244
High schools for girls, higher course	3400	
Technical secondary	3100	1392
Higher school	4500	3460
University	6700	3910
Technical	4500	3460
Normal	3100	1325
Higher normal	4500	3460

¹ The yen is equivalent to about 50 cents

Provision is made for regular increments for service, allowances on special occasions, and special salaries above the maximum for distinguished work. Teachers in schools

maintained by cities, towns, and villages are often given the use of a house or its equivalent in rent.

Teachers enjoy a high social status ; their salaries are often higher than those of government officials of a corresponding grade ; while their services are recognized by conferment of civil rank and decorations, by recognition from the Minister of Education and prefectural governors, and by publicity given for distinguished services. They may not be discontinued without sufficient cause, and elementary school teachers in particular have the right to appeal to the Minister of Education from the action of the governor. Married women are employed, with special privileges in cases of child-birth.

CONTINUATION SCHOOLS

In 1925 the Imperial Diet passed the universal suffrage bill giving the vote to all men over 25 years of age. This measure has focused attention on the need of raising the intellectual level of the people and has resulted in a demand for eight years of compulsory education. For the present this is not possible for financial reasons. As a step, however, in the direction of a longer education for the masses the continuation school is established and has increased rapidly in numbers. Thus there were 2600 continuation schools more in 1921 than in 1918. The total number being 14,839 schools with 5109 teachers and an enrollment of 995,532 pupils.

VOCATIONAL EDUCATION

The number and types of institutions for industrial education have shown considerable increase in recent years, which have also marked the introduction of passage from the industrial schools to the universities, which was formerly closed. This reform has had an effect on the character of the indus-

trial schools which are now not so narrowly vocational as they once were and which have adopted a wider cultural aim, using those subjects most closely related to the industry concerned as the starting point.

There are three grades of industrial schools: The *A* or lower grade, the *B* or intermediate, and the governmental higher industrial schools. The first two grades include the following types: technological, agricultural, fishery, commercial, nautical, and trade schools. The Government maintains special higher technical, agricultural, commercial, and nautical schools.

In 1921 there were 315 industrial schools of grade *A* with 4929 teachers, 96,888 students, and 18,315 graduates; there were 377 industrial schools of grade *B* with 2466 teachers, 53,082 students, and 17,245 graduates. At the same time there were 31 high industrial schools with 1178 teachers, 10,491 students, and 2874 graduates.

MEDICAL WORK

The supervision of school hygiene is under the charge of special officials in the Department of Education and of directors of school hygiene among the prefectural officials. Each school is required to employ a physician to supervise the general hygienic condition and to inspect the pupils from time to time. In 1921, 19,890 schools or 45.4 per cent of the total number had school physicians. All public schools are required to conduct a physical examination of their pupils in April of each year; in schools that do not employ a school physician a private practitioner is engaged for this purpose.

Physical education. — The problem of physical education is being given careful attention and a national institute for physical culture was recently established. All elementary and secondary schools are required to include gymnastics

and physical drill in their curricula. In addition provision is made for voluntary athletics, games, and sports, such as mountain climbing, bathing, skating, camping, picnics, and so on.

Boys in the middle and higher schools and in the university are required to have military training, the purpose of which is educational, for the development of physical qualities, and for training in habits of order and coöperative activity.

UNIVERSITY EDUCATION

Until recently there were five Imperial Universities, those of Tokyo, Kyoto, Tohoku, Hokkaido, and Kyushu. There has been a tendency in the last few years to give university rank to colleges devoted to some special studies. This has been the case with a number of medical, technical, and teachers' colleges; the Tokyo Higher Commercial School was also raised to the rank of a commercial college.

At the same time there has been a similar progressive development among the private universities, even the best of these being regarded until recently only as special schools of lower grade than the university. Thus there are now in Tokyo the following institutions of university rank: Keio, Waseda, Meiji, Hosei, Chuo, Nihon, Kokugakuin, Komazawa, Nisho, and Taisho.

The rise of interest in religious and spiritual matters since the War has led to the establishment of a number of new universities; thus Doshisha and Rikkyo Universities are established on the principles of Christianity, while for the study of Buddhism there are the five universities of Ryukoku, Otami, Rissho, Komazawa, and Taisho.

There is in higher as in other branches of education a strong interest in national culture; a chair for the study of the *Haikai* (Japanese short poems) has been established at

Tokyo Imperial University, one for the history of Japanese culture at Tohoku Imperial University, and chairs in Japanese economic history at Kyoto Imperial University and the Keio University; the literary course in the department of law and literature in Hosei University is endeavoring to make a special contribution to the study of Japanese culture. Finally a new society for the study of Meiji culture has recently been established at Waseda University.

The preparatory courses of the universities are seven years in length and are divided into two parts: the four-year ordinary course, corresponding to that of the middle school, and the three-year courses, either in literature or in science. The curricula and time distribution of the courses in literature or in science are as follows:

	Year	LITERARY COURSE			SCIENTIFIC COURSE		
		1	2	3	1	2	3
Morals		1	1	1	1	1	1
Japanese language and Chinese classics		6	5	5	4	2	—
First foreign language		9	8	8	8	6	6
Second foreign language		4	4	4	4	4	4
History		3	5	4	—	—	—
Geography		2	—	—	—	—	—
Mathematics		3	—	—	4	4	6
Philosophy		—	—	3	—	—	—
Psychology and logic		—	2	2	—	2	—
Elementary law and economics		—	2	2	2	—	—
Natural science		2	3	—	—	—	—
Physics		—	—	—	—	3	5
Chemistry		—	—	—	—	3	5
Botany and zoölogy		—	—	—	2	2	4
Mineralogy and geology		—	—	—	2	—	—
Drawing		—	—	—	2	2	2
Physical exercises		3	3	3	3	3	3
Total		33	33	32	32	32	36

Graduates from the higher schools or preparatory schools of the universities are admitted to the universities in which

one or all of the following departments are found : law, medicine, engineering, literature, science, agriculture, economics, commerce, law and literature, economics and political sciences, science, and engineering. The courses in these departments last three years, except in the department of medicine, where four or more years are required. The bachelor's degree is conferred at the end of these courses. Many of the universities have graduate courses leading to the doctor's degree.

Higher education of women. — Higher education of women is provided in the following types of institutions: Tokyo and Nara Women's Higher Normal Schools, the Tokyo Fine Arts School, the Tokyo Academy of Music, Nihon Joshi Daigaku, and Tokyo Joshi Daigaku. The Nihon Joshi Daigaku is planning by a change of organization to become a university, an example which will probably be followed in the case of the post-graduate courses of Jissen Girls' School and Tsuda Eigaku-Juku.

ADULT EDUCATION

In the field of adult education, which is only in its initial stages, there is a marked development in the provision of libraries by the Government and other public authorities, both national and local, and in the rise of popular libraries. In 1922 there were 2390 libraries with 5,940,000 volumes and 14,828,000 readers. The new facilities, such as the moving picture and the radio, are being utilized for educational purposes, while many periodicals and magazines are beginning to devote attention to educational matters.

The universities, public and private, are playing their part in this movement by the organization of extension courses which are popularizing the sciences among the people. Following the lead of Tokyo, Imperial University settlements are being established among the working classes.

Interest in adult education was aroused by the reports made by the present writer on this phase of activity in Europe and America since the War, while the first step in its provision was taken by Professor Ishida of Keio University. Much effective work for the education of the laboring classes has also been undertaken by the self-sacrificing devotion of a number of social workers.

STATISTICS

Elementary education. — In 1922 out of 9,083,477 children (4,665,921 boys and 4,417,556 girls) 9,008,039 (4,633,480 boys and 4,374,559 girls), or slightly over 99 per cent, were enrolled in schools; this percentage has been maintained for several years. In the same year there were 25,562 schools (13,380 ordinary, 11,825 ordinary and higher elementary, and 357 higher elementary schools) attended by 8,871,982 children (7,863,025 in ordinary and 1,008,957 in higher elementary schools). There is a tendency to reduce the number of single-class schools, replacing them by graded schools; a further reduction in the total number of schools is due to the addition of higher to ordinary elementary schools instead of opening new ones.

Secondary education. — The statistical development of secondary education is indicated in the following tables:

BOYS' SECONDARY SCHOOLS

Year	Schools	Applicants	Admitted	Enrollment	Graduates	Teachers
1918	337	87,548	42,169	158,974	23,682	6,991
1919	345	96,931	45,077	166,616	23,981	7,219
1920	368	123,897	48,328	177,224	23,377	7,665
1921	385	147,954	53,627	194,443	24,919	8,242
1922	422	156,131	63,958	219,102	26,409	9,007
1923	439	—	—	—	—	—

GIRLS' SECONDARY SCHOOLS

Year	Schools	Applicants	Admitted	Enrollment	Graduates	Teachers
1918	420	59,889	37,647	118,746	28,969	5,287
1919	462	74,944	42,406	131,711	31,512	5,795
1920	514	104,488	50,207	151,288	35,441	6,566
1921	580	135,035	60,227	176,759	38,961	7,455
1922	618	143,770	71,039	206,864	44,236	8,539

UNIVERSITY STATISTICS

Year	Universities	Departments	Applicants	Admissions	Enrollment	Graduates	Professors
1918	5	16	5,064	2,966	9,040	2,427	970
1919	6	20	6,418	3,618	10,240	2,506	1,088
1920	16	41	30,294	12,962	21,915	5,466	1,882
1921	18	41	30,514	13,300	26,208	4,070	2,143
1922	26	53	36,296	14,770	35,163	9,838	3,012

Cost of education. — The following table shows the cost of education in 1923 :

KIND OF SCHOOL	TOTAL YEN 1000	EXPENDITURE FOR NEW EQUIPMENT YEN 1000	PER CAPITA COST (Excluding item in last column) YEN
Elementary schools	188,431	32,756	18.1
Elementary continuation schools .	4,042	114	4.0
Middle schools	16,375	4,661	86.1
High schools for girls	9,684	2,262	63.7
Technical schools of secondary grade	17,786	5,056	108.5
Higher schools	4,321	2,186	243.0
Special schools	3,506	1,173	391.6
Technical schools	6,648	3,112	436.5
Universities	15,549	2,584	1,078.2
High normal schools for men . .	691	—	531.0
Higher normal schools for women	431	—	562.7
Normal schools	9,664	1,148	320.7
Schools for blind and deaf . . .	290	96	147.8
Miscellaneous schools	746	17	17.7
Kindergartens	784	72	22.9

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LATVIA

BY

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LATVIA

INTRODUCTION

Latvia, one of the new states that have arisen since the War on the ruins of monarchic Russia, has an area of about 25,000 square miles (65,791 square kilometers) and consists of the provinces Vidzeme (Livonia), Kurzeme (Courland), Zemgale, Latgale, and the capital Riga. The total population of 1,844,805 is divided into 1,354,129 Latvians, 231,655 Russians, 95,675 Jews, 70,964 Germans, 51,143 Poles, and 41,239 belonging to other nationalities. The achievement of independence has given the Latvians an opportunity of developing their own culture as they had been unable to do practically since the thirteenth century. At that time they succumbed to the German crusaders, who established several small states and, introducing the feudal system, ruled the destinies of the Latvian people. After the fall of the small Livonian states political supremacy passed first into the hands of the Poles, then the Swedes, and finally the Russians. In the eighteenth century the economic and legal status of the Latvians was particularly bad and developed into almost complete slavery. Even after freedom was granted to them at the beginning of the nineteenth century, the change had little consequence, since the soil remained entirely in the hands of the German squires. It is only since the middle of last century that the Latvians have been able to breathe more freely and to acquire the land of their forefathers. Elementary education had not been entirely neglected, and when the War broke out, ability to read and write was prac-

tically general among the Latvians of Vidzeme, Kurzeme, and Zemgale, the percentage of illiteracy being high only in Latgale.

Latvia was declared an independent Republic on November 18, 1918, and one of the first tasks undertaken by the new government was the reorganization of the educational system. This was no simple task, since new textbooks had to be prepared and new teachers to be trained as a result of the substitution of Latvian, the mother-tongue of nearly 75 per cent of the population, in place of Russian. A law for elementary and secondary education was passed on December 8, 1919, and for university education on March 27, 1923; on March 17, 1925, a teachers' pension law was passed. The law for elementary and secondary education was intended to be temporary only; a new law, prepared by the Ministry of Education, is being considered by Parliament.

ADMINISTRATION OF EDUCATION

Although some schools are under the Ministries of Agriculture, War, and Finance, the administration of education in general is in the hands of the Ministry of Education, who for the education of Latvians is assisted by a director-general, responsible for the administration of the whole system, the prescription of the curriculum, and the drafting of the courses of study with the approval of the Minister. The education of the minorities, Germans, Russians, Jews, and Poles, is administered by separate directors immediately responsible to the Minister and not to the director-general.

The University, the Conservatory of Music, and the Academy of Art are autonomous except for certain limitations in financial matters.

Educational finance. — The state and the local authorities coöperate in the maintenance of education, the greater part of the burden being borne, however, by the state. Thus

the state maintains 20 elementary schools, pays the salaries in full of 1700 elementary school teachers, chiefly in Latgale and in districts devastated by the War, and contributes to the payment of 50 per cent of the salaries of elementary school teachers elsewhere; 38 secondary schools and 15 vocational schools are wholly maintained by the state and subsidies for teachers' salaries are paid to many others; the cost of the University, the Conservatory of Music, and the Academy of Art is borne by the state except for 30 per cent derived from their own income. Several hundred school libraries have been established by the state, which also gives assistance for food and clothing to many poor and diligent pupils.

The budget of the Ministry of Education for 1925-26 was as follows:

Elementary education	6,407,888 lats
Secondary and vocational education	4,260,509
Higher education	3,703,085
Adult education, administration, etc.	981,944
Total	15,353,426 lats ¹ (\$2,952,582)

¹ 5.20 lats equal \$1.

The budget for education represented 9.54 per cent of the total budget of the state, a sum which rises to 11 per cent when the expenditures of other Ministries for educational purposes are included.

Inspection and supervision. — The inspection of elementary education is in the hands of district inspectors; in the secondary schools the directors are responsible for the supervision of their own schools.

ELEMENTARY EDUCATION

Compulsory attendance and enrollment. — Elementary education is free and attendance is required of all children

between the ages of eight and fourteen; fines are imposed for nonattendance without satisfactory cause. Elementary education is given in elementary schools or in the two preparatory classes of secondary schools which parallel the work of the fifth and sixth years of the elementary schools. There are very few separate schools for children between six and eight; generally such preschool classes are attached to the regular elementary schools. Attendance at the preschool is not compulsory, but in the country most of the younger children are taught reading and writing by their parents under the supervision of the teachers of the local school.

The school year is from 170 to 210 days in length; the year extends from the end of August to the beginning of June, and is broken by vacations at Christmas and Easter and other occasional holidays.

The majority of the elementary schools are coeducational. Of the total number of schools 1217 have only the four lower classes and 589 have the two higher classes. The statistics of elementary education in the last few years are as follows:

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	1,053	90,689	2,580
1920-21	1,254	113,404	3,201
1921-22	1,317	120,859	3,662
1922-23	1,403	129,618	4,346
1923-24	1,435	120,765	4,473
1924-25	1,390	125,863	4,564

The pupils in the Latvian elementary schools in 1924-25 constituted 73.6 per cent of the total number of pupils enrolled in the elementary schools of the country. The enrollment in the elementary schools for the minorities was as follows:

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	202	27,503	1,166
1920-21	358	40,049	1,668
1921-22	408	44,740	1,868
1922-23	455	45,618	2,286
1923-24	439	43,102	2,291
1924-25	464	44,940	2,364

The 44,940 pupils in these schools in 1924-25 were distributed among the minorities as follows: 17,762 Russians, 9474 Germans, 9594 Jews (of these 4951 were instructed in Yiddish, 2539 in Hebrew, and the rest in Russian or German), 4686 Poles, and 3424 belonged to different other groups.

About 20,000 children of school age are not attending school, but the number is rapidly diminishing. Before the War about 41,000 children reached the school age annually; at present the number is much smaller, partly because of the lower birth-rate, partly because of the heavy child mortality, due to the War but greatly ameliorated by the work of the American Relief Administration and the American Red Cross. The number of births since 1914 has been as follows:

1914	31,888	1918	23,676	1922	32,233
1915	24,010	1919	25,217	1923	33,546
1916	20,284	1920	26,796	1924	37,678
1917	20,215	1921	30,958		

It is hardly probable that more than 30,000 children will reach school age each year before 1930.

Curriculum. — The subjects of instruction in the elementary schools are religion (with right of exemption on the request of parents), the vernacular, a foreign language (in

Riga, Vidzeme, Zemgale, and Kurzeme generally German, with English in some schools, and Russian chiefly in Latgale), mathematics, natural science, geography, history, singing, drawing, physical training, manual instruction (boys), and needlework (girls). It has been proposed recently to introduce agriculture and coöperative methods.

The subjects of the elementary schools and the time allotted to each by the regulations of the Ministry of Public Instruction, July 17, 1925, are shown in the following table:

	Year	PRE-SCHOOL	1	2	3	4	5	6
Religion	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(1)
Latvian	6 and (2)	6 ¹	6 ¹	6 ¹	6 ¹	6 ¹	5	(5)
German	—	—	—	(5)	(5)	(3)	(3)	(3)
Russian or English . .	—	—	—	—	—	(2)	2	2
Agriculture	—	—	—	—	—	2	2	2
Coöperation	—	—	—	—	—	—	1	1
Mathematics	4 ¹	5 ¹	5 ¹	4 ¹	5	6	6	6
Nature study	—	—	—	2	3	4	4	4
Geography	—	—	—	2	2	2	2	2
Environmental study . .	4	4	4	—	—	—	—	—
History	—	—	—	2	2	3	3	3
Drawing and modeling .	2	2	2	2	2	2	2	2
Writing	—	1	2	—	—	—	—	—
Singing	—	2	2	2	2	2	2	2
Physical training . . .	2	2	2	2	2	2	2	2
Manual instruction . .	—	—	—	2	2	2	2	2
Household arts (girls) .	—	—	—	—	—	1	1	1
Total (required) . .	18	22	23	24	26	31	32	32
plus (optional) . .	5	4	4	9	7	6	7	7

NOTE: Figures in parentheses indicate that the hours are not obligatory. Figures marked ¹ indicate that an additional hour in the subject may be added.

Pupils who complete the elementary schools and do not proceed to a secondary or vocational school are required to attend a continuation school for one day a week for two years.

SECONDARY EDUCATION

Secondary education is given in four types of schools: gymnasium, real gymnasium, neogymnasium, and real school. Pupils are admitted on completion of the elementary school or of the two preparatory classes which are attached to some secondary schools. There is a movement at present against the preparatory classes and in favor of a common elementary school for all. The length of the courses is four years, with the result that the strain on the pupils to complete the work is too great and the results of the entrance examinations to the University are not always satisfactory. A bill is now being discussed in the *Saeima* (Parliament) in which it is proposed to add a fifth year.

The majority of the schools, with the exception of some in the large towns, are coeducational, while the classes in general rarely have more than 30 pupils. Fees are charged, but they are moderate, amounting to 80 lats (\$15.50) a year in the state schools and to a somewhat larger sum in the municipal schools. Provision is made, however, to take care of poor but able pupils, so that about 25 per cent of the pupils in each school are received free of tuition.

During the last six years the statistics of secondary education have been as follows so far as the Latvian schools are concerned:

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	36	4,550	425
1920-21	40	11,193	763
1921-22	51	11,550	891
1922-23	52	11,761	977
1923-24	53	11,927	1,002
1924-25	51	11,415	947

The enrollment in the secondary schools of the national minorities was as follows:

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	29	2780	289
1920-21	40	7271	652
1921-22	46	8015	792
1922-23	54	7430	970
1923-24	50	7566	959
1924-25	53	7506	960

In 1924-25 the minority schools were divided as follows among the different nationalities:

NATIONALITY	SCHOOLS	PUPILS	TEACHERS
Russians	22	3059	435
Germans	10	2231	222
Jews	13	1634	191
Poles	3	288	48
Lithuanians	1	40	9
Other groups	4	264	55
Total	53	7516	960

In the Jewish secondary schools the language of instruction is Hebrew in the case of 163 pupils, and Yiddish in the case of 266, the rest being taught in Russian or German.

The table at head of facing page gives the subjects of the secondary schools and their time distribution in accordance with the regulations of the Minister of Public Instruction, July 17, 1925.

VOCATIONAL EDUCATION

Vocational education is provided (1) in technical and commercial middle schools giving four-year courses to boys and girls who have completed the work of the elementary schools; (2) in lower technical and commercial schools with two- or four-year courses for boys and girls who have completed the work of the first four years of the elementary

		GYMNASIUM				CLASSICAL GYMNASIUM				REAL SCHOOL			
	Year	1	2	3	4	1	2	3	4	1	2	3	4
Religion ¹		1	1	1	1	1	1	1	1	1	1	1	1
Latvian		4	4	4	4	4	4	4	4	4	4	3	4
Latin		4	3	4	3	6	6	6	6	—	—	—	—
Greek		—	—	—	—	3	4	3	4	—	—	—	—
German		4	4	4	4	3	4	4	4	4	4	4	4
English, ¹ French, ¹ or Russian ¹		3	3	3	3	3	3	3	3	3	3	3	3
Mathematics		4	4	4	4	4	4	4	4	5	6	6	6
Nature study		2	2	2	2	1	1	1	—	2	2	2	2
Physics		2	2	2	2	2	2	2	2	3	4	4	3
Chemistry		2	2	—	—	—	—	—	—	3	2	3	2
Geography and cosmography		—	2	2	2	2	—	—	—	2	2	2	2
History		3	3	3	4	3	3	3	4	2	2	2	2
Drawing and modeling		2	2	1	1	1	1	2	—	2	2	2	2
History of art		—	—	1	1	—	—	—	—	—	—	—	—
Introduction to sociology		—	—	—	—	—	—	—	—	—	—	—	2
Introduction to philosophy		—	—	—	—	—	—	1	3	—	—	—	—
Physical training		2	2	2	2	2	2	2	1	2	2	2	2
Manual instruction		1	1	1 ¹	1 ¹	—	—	—	—	2	1	1	1 ¹
Singing ¹		2	2	2	2	2	2	2	2	2	2	2	2
Total, required		30	31	29	29	31	31	32	32	31	31	31	31
optional		6	6	7	7	6	6	6	6	6	6	6	7

NOTE: Subjects and hours marked ¹ are optional.

school; and (3) in short-time courses for various trades. Technical and commercial education is under the supervision of the Ministry of Education.

The development of the technical and commercial middle schools is indicated in the following table:

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	3	285	54
1920-21	5	907	93
1921-22	6	1406	158
1922-23	8	1361	159
1923-24	12	2137	221
1924-25	14	2610	253

The corresponding figures for the lower technical and commercial schools are as follows :

YEAR	SCHOOLS	PUPILS	TEACHERS
1919-20	1	77	12
1920-21	2	174	27
1921-22	6	738	67
1922-23	11	859	153
1923-24	13	1447	183
1924-25	15	2017	196

In 1924-25 there were in the five institutes for teachers (4 Latvian and 1 German) 927 students and 96 teachers. In the same year the Ministry of Agriculture had under its supervision 41 schools with 2096 pupils and 111 teachers. There were also other schools for vocational education under the Ministries of War and Finance. In all there were in 1924-25 80 vocational schools with 7766 pupils and 713 teachers.

TEACHERS

Training of teachers. — Teachers for the elementary schools receive their preparation in teachers' institutes which offer five-year courses based on the completion of the elementary school. Since 1925 there is an institute which gives a two-year course to graduates of secondary schools. In order to supply the large number of teachers needed after the establishment of the Republic special one-year courses were organized for secondary-school graduates.

To become a teacher in a secondary or vocational school candidates must, as a rule, have had a university education, must pass an examination in psychology, education, and special methods of the subjects that they intend to teach, and, finally, must teach for a year under the supervision of the principal in a secondary school. Teachers of modern

languages are trained in the Faculty of Philology in the University or in the special English and French Institutes. Of these Institutes the former has a five-year course and the latter a two-year course. Teachers of physical education receive a preparation of two years in an Institute for this purpose. Summer courses are arranged for teachers in service, while those who teach in Riga often continue to take courses in the University.

Salaries. — While the salaries of Latvian teachers are low as compared with those paid in other countries, the position of the teachers is not unsatisfactory when the conditions of the country are taken into account. On the whole the Government lends a willing ear to the needs of the teachers.

In the elementary schools the teachers are paid from 100 to 172 lats (\$19 to \$33) a month, according to their training and length of service. To this are added free lodging, fuel, and light, and in the country they are often given the use of a piece of land. In the secondary and vocational schools teachers are paid from 160 to 260 lats (\$30 to \$50) a month without lodging and are required to teach 24 lessons a week ; additional remuneration is paid for each lesson beyond 24 or for services as tutor if a teacher has the supervision of a class. Principals of secondary or vocational schools receive 300 lats (\$58) a month and free lodging.

Married teachers receive extra allowances of from 12 to 24 lats for the maintenance of each child under 16, or under 18 in the case of a child who continues to attend school ; the same allowances are paid for the wives, if they do not have their own incomes.

Pensions. — Every teacher who has served 25 years and has reached the age of 55 is entitled to a pension equal to 60 per cent of his maximum salary ; this amount rises to 80 per cent of maximum salary after 35 years of service. Provision is also made for disability allowances in cases of serious ill-

ness. The cost of pensions is borne wholly by the state without contributions from the teachers. Both salaries and pensions are the same for men and women teachers.

MEDICAL AND SOCIAL WORK

The health of all children in the elementary, secondary, and vocational schools is supervised by physicians, in the towns generally once a month, and in the country at least once a year. Nearly all the urban schools provide tea or milk for lunch, while in the country schools hot dinners are sometimes provided.

Physical training is compulsory in all schools, and the interest in athletics is increasing. While the majority of the older schools are unsatisfactory, the new school buildings have large airy classrooms and wide and well-lighted corridors. Summer camps are arranged by the Scouts, the Y.M.C.A., and the Y.W.C.A.

There are 6 schools with 303 pupils and 56 teachers for blind and deaf and dumb children; and 5 schools with 191 pupils and 16 teachers for children that cannot follow the courses in the regular schools. For delinquent children who may prove a menace to others there are 4 homes with 250 children and 19 teachers.

Many school children are employed in the summer vacations as cowherds and shepherds to enable them to earn the means of maintenance during the winter.

UNIVERSITY EDUCATION

Higher education is given in the University, the Conservatory of Music, and the Academy of Art, all of which are located in Riga and all maintained by the state. The University, which was opened in 1919, includes in addition to

the usual faculties a Faculty of Technology, a Faculty of Agriculture, and a Faculty of Veterinary Science. The University is administered by a Council, elected by the faculties and including representatives of the private docents and assistants, and a Rector elected by the Council for one year. Each faculty is administered by a dean elected by the members of the faculty ; the deans are members of the Council *ex officio*.

The requirement for admission to the University is graduation from a secondary school, but the Rector may grant permission to others without this qualification to attend lectures as auditors without any further rights to examinations or degrees. The first degree (candidate, engineer, etc.) is granted after four to six years of study ; the doctorate, which is required of candidates for professorships, is obtainable after further advanced study.

As a rule the university courses are given in Latvian, but there are courses in German and Russian, while in the Faculty of Philology there are also courses given in French and English. German is the language of instruction used in the private university courses of the Herderinstitut. Besides these there are private university courses of a more popular character given in Latvian and Russian.

As is shown in the following table the number of students has increased with great rapidity in the last few years :

YEAR	TOTAL	MEN	WOMEN
1920 (May)	1354	704	650
1921 (May)	3468	2230	1238
1922 (May)	4445	3005	1440
1923 (May)	5136	3459	1677
1923 (November)	5934	4061	1873
1924 (December)	6378	4470	1908
1925 (December)	6608	4761	1847

Many students work their way through the University; some study only in the evenings at the end of the day's work, devoting a longer period to the completion of the courses. The students have a very well-developed system of self-government and are represented in the University Council, the men and women enjoying the same rights.

In December, 1925, there were in the University 310 members on the teaching staff: 69 professors, 95 docents, 24 private docents, 16 lecturers, and 106 assistants. The budget of the University in 1925-1926 amounted to 3,210,157 lats (\$621,184). The university fees are 140 lats (about \$27) a year, with a probability that they will be raised for the academic year 1926-27. The faculties have the right to grant free tuition to about 30 per cent of the student body to poor students with ability.

The Conservatory of Music had, in 1925, 356 students and 43 instructors, and the Academy of Art was attended by 257 students taught by 24 instructors.

CURRENT PROBLEMS

The problems that are most discussed are concerned with the development of the system of vocational education and the organization of secondary education. The latter problem centers round the question whether the secondary school course should be six or seven years in length following four years of elementary education, or four or five years in length following six years of elementary education. There is also considerable interest in the school of activity.

Study and research in the problems of education are conducted in a section of the Faculty of Philology of the University. Provision is also made for sending Latvian educators abroad to study the educational system of foreign countries, and for inviting foreign educators to lecture on problems of education in Riga.

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NEW ZEALAND

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NEW ZEALAND

INTRODUCTION

New Zealand is one of the self-governing dominions which constitute the British Commonwealth of Nations. Like other British dominions, it is ruled by two houses of Parliament and a Governor-General who represents the King. New Zealand is composed of two large islands and a vast number of smaller ones. The principal islands are about 1200 miles long and lie about 1200 miles southeast of Australia on one of the world's great ocean highways. The area of the group is approximately equal to the combined areas of the States of New York, Pennsylvania, New Jersey, and Delaware. The climate, being insular, is even milder and more equable than the climate of the western United States. Dependencies extending from the Antarctic regions to a point within 8° of the equator are governed by New Zealand. Of the population more than 98 per cent are of British birth or descent.

ADMINISTRATION OF EDUCATION

The education system, like many other public enterprises, is truly national in character. Prior to the passing of the Education Act of 1877, each of the nine provinces which then existed had its own system of education with local control and special taxes supplemented by provincial grants. The arrangements had much in common with current American practice. The Act of 1877 made elementary education throughout the country free, secular, and compulsory. It

also established a scheme of administration which occupies a position about midway between complete centralization and extreme localization. The aim was to secure the economy and efficiency usually associated with large-scale management together with the local viewpoint and the personal interest commonly attributed to local control. On the whole, the plan is a success, although disputes between the central and the local authorities are by no means unknown. Indeed, such differences of opinion form a desirable safeguard.

The Education Department. — The political head of the Education Department is the Minister of Education, a member of the Dominion Cabinet. He remains in office only as long as the political party to which he belongs commands a majority in the House of Representatives. He directs the Department's policy and exercises general supervision. The permanent staff consists of the Director of Education, the Assistant Director of Education, some fifty inspectors of schools, a staff of clerks, and other necessary officers. These officers have complete security of tenure. They are appointed by a nonpolitical Public Service Commissioner, and in the event of dismissal or nonpromotion they have the right of appeal to a special court whose decision is final. Native schools (for Maori children) and a few special schools for defective or delinquent children are under direct Government management. Other educational institutions are under the immediate control of local boards, although the method of finance and the system of inspection give the Education Department a potent, indirect influence. The inspectors of schools are the Department's executive and supervisory officers on the professional side, while the local boards, in effect, are the Department's local agents on the financial side.

General Council of Education. — The General Council of Education is a statutory, advisory body composed of seven-

teen members representing the various educational interests of the Dominion. It meets once a year, or oftener, if required, to discuss educational questions and to tender advice to the Minister of Education. It has no executive powers. Some reformers suggest that the Council should be reduced in size and should function as a National Board of Education, but no action in this direction is contemplated at present.

Education boards. — Education boards are local bodies charged with the oversight of all elementary schools, of district (rural) high schools, and of many of the technical schools. There is a board for each of the nine education districts into which the Dominion is divided. These districts vary widely in size. On the average they embrace about fourteen counties, including all cities, towns, and villages within their areas. The organization is an extended form of the county unit which is attracting so much attention in America. Members of boards are elected by members of school committees, who, for this purpose, function like an American electoral college. The term of office is four years. Half the members retire every second year. There is no property qualification for office. Indeed, a property qualification is not required for any public office in this country. Human values are paramount and women have the same rights as men. Subject to the limitations mentioned under other headings, education boards have the powers usually possessed by such bodies.

School committees. — Each school, or in some instances, a group of not more than four schools, has a school committee of five, seven, or nine members according to the size of the school. The members are elected annually by the local householders and parents (whether householders or not). Householders need not be property owners. Subject to the general supervision and control of the educational board, the committee manages the material side of the school, but

it cannot interfere with the teacher so long as he satisfies the inspector and complies with the regulations. Formerly, school committees had wide powers, including a voice in the appointment of teachers. They are very useful bodies and often do much to forward the cause of education. Neither committees nor boards have any right to impose taxes or to raise loans. They depend upon the Government for their finance. They may, however, receive voluntary contributions which, if approved, are subsidized by the Government.

School and technical school boards. — The high schools of each city or large town are controlled by a high school board, while each of the larger technical schools has its own technical school board. A movement to amalgamate these two types of boards and of schools is on foot and has received legislative sanction. These boards, within their jurisdiction, combine the functions of education boards and school committees. The constitution of the boards varies considerably. The education board and the parents of the pupils usually elect three members each. In many cases, municipal councils and employers and employees in local industries elect members.

It is noteworthy that, with the exception just mentioned and two other minor exceptions, there is no connection whatever between civic government and educational control. The large measure of educational control exercised by parents merely because they are parents is a special feature of the New Zealand system.

Educational finance. — There are no school taxes in New Zealand and boards have no authority to raise loans. The government undertakes the whole responsibility for educational finance. Most of the expenditure is met by annual appropriations made by Parliament and distributed to the various boards by the Education Department. Some income is derived from endowments of land held by high

schools, university colleges, or the government itself. A smaller sum is derived from donations and bequests for specific educational purposes. Students' fees form a diminishing proportion of the income of the university colleges, and an almost negligible part of the income of secondary and technical schools. Fees are paid only by students who fail to qualify for free education or who are not prepared to take the full course of study. Each board is entitled by regulation to a specified annual allowance for its administration expenses, for the maintenance of buildings, and for other necessary purposes, but it is not allowed to divert any money from the object for which it was granted. Funds for school committees are supplied by the Department through the board. Grants for acquiring sites, extending or erecting buildings, and providing equipment are made by the Department on the application of the board supported by the recommendation of an Inspector of Schools.

Inspection and supervision. — The Education Department controls and directs the educational activities of the schools through its inspectors. A group of these officers is stationed in each of the nine educational districts, the head of the group being called the Senior Inspector. Until January 1, 1915, the inspectors were employed by the boards, but on that date they were transferred to the Department, although they still work in close association with the boards. The two bodies generally collaborate quite amicably, although the powers of the inspectors are steadily increasing, while those of the boards tend to diminish. Inspectors are drawn from the ranks of successful teachers. As a rule they must hold university degrees or equivalent qualifications.

Ordinarily, every school, both public and private, is inspected thoroughly twice a year. A general report on its educational work, its buildings, equipment, and grounds is

sent in to the school authorities, and a more detailed report on the grading and the consequent chance of promotion are based largely on these reports. The Department desires that the inspectors should by precept, example, and appreciation encourage teachers to investigate and experiment with the newest methods of education and to keep abreast of the times in every respect. A few of the Department's inspectors are not attached to any district. They devote their whole time to the larger high schools or technical schools. It is proposed, however, that all inspectors visit schools of every type.

About thirty supervisors of elementary agriculture are employed by the various education boards to assist teachers of elementary schools and district high schools to teach this subject efficiently. The boards also employ a few supervisors of manual training and home economics.

The Education Department employs a Director of Physical Instruction and a number of itinerant instructors who visit both urban and rural schools. Not only do they supervise the physical training of normal pupils but they form special classes for the correction of known physical defects. These classes are conducted by the school teachers under the specialists' direction and are watched closely by the school medical officers, who speak very highly of the work done. Boy Scouts and Girl Guides are seen everywhere, while football, cricket, tennis, hockey, tramping (hiking), swimming and life-saving, and athletic sports of all kinds are commonplaces of New Zealand education.

The Department has just appointed a Supervisor of Music, a highly qualified musician, selected by an eminent musical authority in England, who will direct the musical education of the Dominion.

Organizing teachers are employed by the boards to help inexperienced country teachers. Each organizing teacher

has charge of not more than fifteen one-room schools and acts as supervising principal as long as necessary. The venture has amply justified its existence.

PRESCHOOL AND KINDERGARTEN EDUCATION

With the exception of the classes of the teachers' training colleges, the government does not undertake preschool or kindergarten education of the traditional type, although so-called "kindergarten" and "Montessori" methods are in general use in infant schools. In the congested parts of the larger towns free kindergarten and nursery schools are carried on by private associations which receive government subsidies if the work, the building, and the equipment are approved by an inspector of schools. A few private kindergartens exist in the wealthy suburbs of the larger cities. The general feeling is that a child who lives a natural life in the open air — as most New Zealand children do — is receiving the best type of preschool education.

ELEMENTARY EDUCATION

Compulsory attendance. — Since 1844 elementary (or primary, as it is called in New Zealand) education has been free, secular, and compulsory. Children may, and usually do, enter the school at five years of age. From the age of seven to the age of fourteen they must attend every time the school is open unless prevented by illness or one of the other causes mentioned in the Act. Every school must be open for at least 400 half days a year. Schools are usually in operation five days of five hours each week. It is proposed to extend the age of compulsory-education attendance. The only legal defense when a parent is prosecuted is the possession of a certificate of exemption of attendance issued by the principal or the school committee. In the absence of

such a certificate a magistrate must convict. His only option is the amount of the fine, which must be not less than two shillings and not more than ten shillings for each week in which the child failed to make a full attendance. The compulsory clauses of the Act are administered by the education boards who appoint special attendance officers in accordance with the Act. The clauses apply to private as well as public schools. All private institutions for children of school age must be registered and be under government inspection. The teachers also must be registered, and inefficient private schools are not allowed to exist. Anyone concerned in the management of an unregistered private school is liable to a heavy fine, and the parents of scholars attending are also liable to prosecution. The average attendance last year for the whole Dominion was 90.6 per cent of the average number enrolled.

Curriculum. — The elementary course normally covers a period of eight years. There are two primer classes (each of which is usually subdivided) and six other classes known as *standards*. These standards are numbers from S1 to S6 and correspond to Grades 3 to 8 of the American schools. Co-education is general in elementary schools. In a few instances the girls' primer classes and S1 are taught in a separate school under its own headmistress. The last of the separate boys' and girls' schools will be closed before this *Yearbook* is published.

The Act prescribes that the program of instruction shall include: English, arithmetic, geography, history, drawing, handwork (including needlework for girls), nature study, elementary science (including agriculture and home science), vocal music, physical instruction, hygiene, civics, and moral instruction. Religious instruction is excluded, but, with the consent of the school committee, such instruction may be given in any building before or after the usual school hours.

A persistent agitation in favor of Bible reading in school hours has been carried on for many years but so far without success. Recently a bill providing for religious exercises in schools was defeated in Parliament by only one vote. An ecclesiastical body announces that the newly elected Parliament will pass the bill. Although every subject mentioned in the Act is definitely prescribed, principals of schools have the utmost freedom in drawing up courses of study. It is intended that the courses should vary from school to school in order to suit local conditions. All courses must be approved by an inspector, but he is expected to take a liberal view.

The Department's publications. — In addition to its *Annual Reports* the Education Department issues from time to time special reports on educational subjects. It also issues two monthly papers: *The Education Gazette* is a professional paper for teachers. It serves as a channel for official information as well as a means of disseminating instructional and inspirational articles on educational subjects monthly. *The School Journal*, issued monthly in three parts and designed respectively for junior, intermediate, and senior elementary classes, fills the place formerly occupied by the miscellaneous reader. Its arrival is eagerly awaited by the children who read its fresh and interesting matter with avidity. Needless to say, it forms only part of the reading course, as supplementary readers and library books are liberally supplied.

Tendencies and changes. — The tendency among the more progressive teachers is towards more individual and group work and less class work. This is most marked in the infant classes (kindergarten-primary and grades 1 and 2). The teachers of these classes usually adopt a thoroughly scientific attitude towards their work and are in close touch with forward movements in other countries. The barrack-

room type of discipline has disappeared. Not a few of the teachers — more especially the younger ones — of the higher classes are similarly imbued with the modern spirit, but there is still a tendency in some quarters to let the subject of instruction come between the teacher and his pupils. The future, however, is full of promise, for the teachers are reading, traveling abroad, and experimenting.

The New Zealand Educational Institute. — A characteristic of New Zealand education is that most of the reforms and progressive movements have been initiated by the teachers acting through their national organization, the New Zealand Educational Institute. This is a highly respected and influential body especially recognized under the Education Act. Its advice is frequently sought by the Education Department and the boards. Its monthly magazine, *National Education*, is a vigorous advocate of educational reform.

Special classes. — The provision of better types of education for adolescents is under consideration. Classes for mental defectives have been established in several centers and it is expected that this work will extend, provided teachers with suitable training can be secured. Lip-reading classes for children who are not actually deaf but are "hard of hearing" and classes for stammerers have been formed in the four larger cities. It is hoped that the system will soon include classes for atypical children of all kinds. Schools for the dumb, the blind, and the delinquent have been in operation for many years.

RURAL EDUCATION

One of the outstanding features of the New Zealand education system is the effective manner in which rural education is being handled. The writer's somewhat varied studies and research in the northern hemisphere did not reveal any

corresponding scheme. The following are some of the methods adopted :

(1) Any community which can guarantee an average attendance of nine or more pupils can secure, without cost, a properly equipped building of modern type and a teacher drawing a regular government salary.

(2) Country teachers are better paid than urban teachers with similar qualifications and experience. The maximum salary and allowances payable to a capable teacher in a very remote country school is £400 a year.

(3) Extra grading marks — thus insuring more rapid promotion — are given to teachers in charge of schools.

(4) A junior teacher cannot be promoted unless he has served two years in a country school.

(5) In making appointments, the board may give special preference to a teacher who has served for at least two years in a remote district or in a rural school.

(6) School medical officers and nurses devote as much attention to country children as to city children. The activities of the dental clinics also are rapidly extending to the country.

(7) Government physical instructors visit country schools; so also do agricultural instructors. Skilled organizing teachers assist inexperienced teachers when required.

(8) Country schools are under the care of the same boards and the same inspectors as the city schools.

(9) Country school buildings are designed by the same architects as the city school buildings, and comfortable residences for the teachers are frequently provided.

(10) In scattered communities two small schools may be placed under a highly paid teacher who works them on alternate days, half-weeks, or weeks. He works six days a week. Fine results are often secured.

(11) Where the population is unusually sparse, an itinerant teacher may have charge of three or four very small schools.

(12) When fewer than nine pupils are available and part-time instruction cannot be arranged, the government

makes a grant of fifteen pounds a year per pupil and the parents contribute a sufficient amount to secure the services of a teacher. Sometimes a mother is paid the government subsidy for teaching her own children.

(13) Perhaps the most striking feature of the system is the introduction of correspondence classes — a modification of the plan so widely used for the adults. The success and popularity of the classes is quite remarkable and much of the work would do credit to a city school. There is a clamant demand for an extension of the scheme, and it is even suggested that high-school subjects should be included.

(14) Where necessary children are conveyed to school at the government expense. Thousands of children travel free on the railways, which are owned by the government.

(15) The consolidation of schools has been begun.

(16) When a child is obliged to live away from home, the government makes a small allowance towards his board.

(17) Any rural school which can assemble twenty children who have completed the primary course, may be made a district high school with special high-school teachers.

(18) Large numbers of rural children attend manual and home-economics classes at convenient centers.

(19) Hostels at which country children can board at a minimum cost are attached to town and city high schools, and it is proposed to establish similar hostels in connection with elementary schools.

(20) Each year a number of scholarships, carrying free tuition in a high school and a boarding allowance, are awarded by the Government to country children. The very liberal provision for scholarships and bursaries has placed thousands of New Zealand's sons and daughters on the highway to fortune. Prominent among these are the late President R. C. MacLaurin, of the Massachusetts Institute of Technology, and Sir Ernest Rutherford, the famous scientist, both of whom won scholarships from New Zealand's rural schools.

(21) Many university scholarships and bursaries and all

studentships in Teachers' Training Colleges carry boarding allowances for students who are obliged to live away from home.

A country without illiterates. — Much of the work done in rural schools is equal to that of good city schools, and the far-reaching effect of the system is well illustrated by a recent action of the census authorities. They have found that illiteracy has practically disappeared, and so have deleted the questions relating to educational status from the census paper.

SECONDARY EDUCATION

Junior high schools. — Junior high schools have recently been introduced. So far only five are in operation, and they are of four different types. One is a city institution independent of any other school. It has been established long enough to prove its worth and to create a demand for similar schools. Two are lower departments of senior high schools; one is an upper department of a large suburban elementary school. These are still in the experimental stage. It is probable that the types evolved will be different from the American, although the underlying principles will be very similar. No definite courses of study are prescribed, but each school is working out its own destiny and is offering courses suited to the needs of its clientele — academic, agricultural, commercial, art, domestic, etc.

Further experiments with adolescent education in rural districts are contemplated, and it is generally agreed that the 6-3-3 or the 6-6 must supersede the present arrangement (8-4 or 8-6). These schools are absolutely free to any pupil who completes the fourth standard (grade 6).

Perhaps the most serious danger besetting junior high schools is the lack of teachers, principals, and inspectors with the necessary training and outlook. How, or whether,

this difficulty will be overcome is a matter in the lap of the gods.

Secondary schools. — Secondary education is given in high schools (sometimes called colleges or grammar schools), technical high schools, district high schools (connected with elementary schools), or private secondary schools, usually denominational. Less than 10 per cent of the pupils attend private secondary schools. Secondary education in every publicly controlled institution is free to qualified pupils. Those who satisfy an inspector of schools, by examination or accrediting, that they are likely to profit by a secondary or technical education are awarded a free place for two or three years. At the end of that time, if they are doing satisfactory work, they may be accredited to a continuation of their free place. Doubtful candidates are required to pass a public examination to secure further free tuition. In secondary schools, as in elementary, the principal has wide liberty in drawing up the course of study. The high schools proper usually tend to follow traditional lines while the technical high schools stress modern and practical subjects. In the small secondary schools of all types and in all the technical high schools, coeducation is practiced; in the large traditional high schools boys and girls are taught in completely separate institutions. Last year 52 per cent of the pupils who qualified for secondary education entered public high schools, while a considerable number joined private secondary schools or evening classes at technical schools.

VOCATIONAL EDUCATION

Full-time courses. — Technical schools or colleges are well distributed throughout the country. At the present moment trade and vocational education are in the melting pot. Far-reaching recommendations have been made by the experts who conducted the recent investigations, and it

is probable that the whole system will be largely reconstructed. Briefly stated, the suggestions are that agricultural and home-making education should follow the lines adopted in the United States and Canada, while the technical colleges should be reorganized after the pattern of the best Australian institutions. The latter arrangement would produce a system of trade schools suitable to local requirements. There is little doubt that a strong forward movement will soon be made. In one or other of the university colleges, excellent courses in home economics, engineering, mining, dentistry, and medicine are provided, as well as courses in law, commerce, agriculture, forestry, etc. There is also a Government Farm School. Access to these courses is facilitated by a generous provision of scholarships and bursaries, often with boarding allowance. Several schools of mines exist apart from the University, in the different gold fields, and New Zealand mine managers, engineers, and metallurgists are sought in many parts of the world.

Part-time courses. — Any young person between fourteen and seventeen years of age, who is not otherwise receiving a suitable education, may be compelled to attend a technical or continuation class for five hours a week for thirty weeks in the year. Although this part of the Act is not yet in full operation, its provisions have been applied to a number of school districts.

TEACHERS

Training and certification. — At present there is no differentiation between the training and certification of elementary and secondary teachers, but it is highly probable that a special college or a University Faculty of Education, charged with the training of secondary teachers, will shortly come into being. Most prospective teachers who are not university graduates spend three or four years in a high school and

pass the university matriculation examination or its equivalent. They are then attached (usually for two years) as probationers or pupil teachers to a public school, where they receive both professional and general education. They observe and teach part of each day, and on the successful completion of this stage, they enter one of the government training colleges, where they ordinarily remain for two years. They qualify for certificates either by training college examination, or by the Department's examination, or partly by the one and partly by the other. A high standard of attainment is demanded. Certificates are now of four classes — *A*, *B*, *C*, and *D*. Class *A* is the M.A. degree with Honors in Education, or its equivalent; Class *B* is a bachelor's degree or its equivalent, plus professional subjects; Class *C* represents two years of University work plus professional subjects; and Class *D* requires work up to the matriculation standard in a large number of subjects, some academic and some professional.

Male pupil teachers and probationers are paid £85 a year, and females receive £80, if they live at home. All those obliged to live away from home receive £30 more as a boarding allowance. They are also paid these salaries and allowances, in addition to free tuition and free university lectures, throughout their training college course. Students who have passed the necessary examination may enter a training college from a high school direct, but their allowances are £20 a year less than the amount paid to those who take preliminary training. University graduates take only one year in the training college and receive full allowances. Teachers in service may take courses ranging from three months to one year with allowances at the lower rate. Male students enter into a bond to teach for five years, and females engage to teach for three years immediately after the termination of their training.

New regulations coming into force shortly prescribe the following course of training:

- (1) One year as probationer in a school.
- (2) Two years in the training college.
- (3) One year as a student assistant working under the direction of a skilled principal. During this year a woman student will be paid £135 and a man £140.

The training of a teacher costs the government £280, but the control gained by reason of the teacher's bond of service gives the authorities power to send each teacher where he is needed. This power is of great value in connection with the efficient staffing of rural schools.

Salaries of elementary teachers. — The salary schedule is drawn up by the Education Department, and each salary takes account of several factors:

(1) There are positions of several ranks in each school except the small ones. The salary for each position rises by annual increments of £10 or £15 from a specified minimum to a definite maximum.

(2) A sum varying from £10 to £60 a year, according to the teacher's place on the grading list, is added as a reward for efficiency.

(3) Every married assistant (including any widow or widower with a child under 16 years of age) receives £50 married allowance.

(4) Every teacher in charge of a school with an attendance of nine or more pupils is entitled to a dwelling or to house allowance.

(5) Teachers in rural or remote districts receive an extra allowance of from £10 to £70 a year, according to the degree of remoteness. This is in addition to the higher rate of salary paid to all rural teachers.

(6) Teachers of half-time schools (which are open on Saturdays) receive a salary a grade above their actual position. The maximum increase under this heading is £70 a year.

(7) The infant mistress in most schools and the senior woman assistant in a district high school receive an extra payment of £50 a year.

(8) The headmaster of a district high school receives an additional salary ranging from £30 to £80 a year.

(9) For schools with an attendance of eight or less, a subsidy of £15 per pupil per annum is paid by the government. The parents of the children provide the balance of the teacher's salary.

The lowest salary paid in regularly constituted schools is paid to junior assistants in urban schools. A person occupying such a position might conceivably receive £95 a year more by taking charge of a remote one-room school.

There is no differentiation between the salaries of men and women head teachers in elementary schools, but men assistants are paid from £15 to £30 a year more than women. This differentiation is a burning question in educational circles at the present moment. Since the salary schedule is not in a permanent form at this time, it is useless to give details. In general, city salaries are considerably lower and rural salaries higher than is usual in America.

Teachers of junior high schools, technical schools, and high schools are better paid than elementary teachers. The highest salary (£960) is paid to the principal of a technical college.

The average salaries of teachers in the 35 public secondary schools in 1920 were as follows :

	MEN	WOMEN
Principals	£720	£553
Assistants	374	287
All teachers	402	303

Pensions. — Twenty years ago the Teachers' Superannuation Act came into force, and in its present form it compels

every teacher to contribute to the superannuation fund. Contributors pay 5 per cent of their salary, according to their age at the time of joining. Annuitants draw an amount equal to one sixtieth of their salary for each year of service. The maximum pension is two thirds of the average salary for the three years immediately preceding retirement. For those who have entered the service since 1909 there is the further proviso that their retiring allowance must not exceed £300. The scheme extends to all officers of the education service, including university staffs. A man may retire on superannuation after forty years' service or on reaching the age of sixty-five, while a woman may enjoy this privilege after thirty years' service or on attaining the age of fifty-five. In some cases these conditions are relaxed. A person who has served for at least fifteen years becomes a beneficiary should he become medically unfit. The government subsidizes the fund to the amount required to keep it actuarially sound, and last year this meant about a fifty-fifty contribution. The fund is administered by a nonpolitical board. In the event of a contributor's death his heir is entitled to draw all the money paid into the fund. A widow may either draw out all her late husband's contributions or may receive a small pension for herself and for each child under fourteen years of age.

Tenure and status. — From the time a certificated teacher secures an appointment until he reaches the retiring age (65 years for men and 55 years for women) his tenure is absolutely secure if he is reasonably efficient and if his moral character is satisfactory. Should a board dismiss, demote, or transfer him, he has the right of appeal to a special court before which the board has to prove its case. An impartial judgment is always given and it is final. There has been no court case for several years. Promotion, too, is certain for the efficient teacher. Once a year, the inspectors of the

education district, sitting as a board, grade all the teachers within their jurisdiction according to efficiency, academic attainments, and length of service. A list of the names of these teachers, arranged in order of merit, is published in *The Education Gazette* which is issued monthly by the Education Department and circulated among the members of the teaching profession. Any dissatisfied teacher has the right of appeal (which is freely exercised) to a special court whose decision is final. Appointments to vacant positions are made, except in a few exceptional cases, in accordance with the candidate's position on the graded list. Thus the education board's control over appointments is more nominal than real.

The actual power has passed to the inspectors, and the whole Dominion is every teacher's field of promotion. Teachers are especially protected by a clause in the Education Act. "Any person who wilfully disturbs any school or who upbraids, insults, or abuses any teacher . . . in the presence or hearing of the pupils . . . is liable to a fine not exceeding ten pounds." Any person who has just cause for complaint against a teacher must make it in writing to the school committee whose duty it is to make any necessary investigation. Thus the teacher holds an independent and honored position in the community. If he fills his office worthily, he is a leading citizen and his social status is beyond question.

High-school and technical-school teachers are graded by the inspectors who supervise their work. The former are placed in four grades while the latter are placed in two divisions — professional and general — each of which is subdivided into six classes. The grading is based on efficiency, academic or other attainments, and length of service. Boards must select candidates for positions from the appropriate grade or class, but are permitted a liberty within those limits.

EDUCATIONAL TESTS AND MEASUREMENTS

Tests of educable capacity ("intelligence" tests) are slowly winning their way to recognition in this country. Last year the Education Department applied the Terman *Group Test of Mental Ability* to every high school and technical school entrant in the Dominion. The results, which have been published in pamphlet form, were so satisfactory that many teachers are now using group tests. Victoria University College, Wellington, has for many years given instruction in individual testing based on the Binet-Simon and other scales. Tests of various kinds have been in use for a considerable time in connection with the work of special schools and special classes. Many teachers and some inspectors have used or encouraged the use of psychological tests. In the Wellington education district, the inspectors as a body recommend that teachers should classify their pupils on the joint result of a mental test and an achievement test (or examination), as is done in some American cities. The same inspectors, with a view to instructing teachers in modern methods of examining, are using standardized achievement tests in several subjects. A few of these tests are of British origin, but most of those used are the well-known American tests adapted to suit our conditions. Inspectors and teachers agree that the new form of test is an infinite advance on the traditional type of examination. A rapidly increasing use of standardized tests may be expected. The Education Department is, at the time of writing, using several of the best American tests (done in a slightly modified form) in conducting a survey of the elementary schools. About 20,000 pupils of typical schools in the different education districts will be tested. The writer is now actively engaged in this work. Scales by Ayres (Spelling), Haggerty (Reading, Sigma 3, Form A), Haggerty (Test 2, Intelligence

Test, Reasoning in Arithmetic), Courtis and Monroe (Arithmetic).

MEDICAL AND SOCIAL WELFARE

Medical inspection was inaugurated in 1912. At present the staff consists of a director, fourteen school medical officers, and thirty-one school nurses, all of whom are employed by the Dominion Department of Health. These officers visit both urban and rural schools. Their efforts are seconded by the teachers and the physical instructors and much valuable work is done. Health camps have been held in one district for many years. A special camp for mental defectives was held last year in another district, while a third district is actively promoting open-air schools. The usual good results attend these movements. Convalescent homes for children are found in different localities.

A preventive and remedial campaign against goiter has recently been opened with promising results. The areas in which iodine is deficient have been mapped, and children in those areas are under special surveillance and medical treatment.

Prevention of diphtheria is another activity of the medical officer and, with the parent's consent, the children are inoculated with toxin and anti-toxin.

The Junior Red Cross has taken root in this country where it functions as it does in other countries, and is rapidly winning its way in the schools. It publishes an excellent monthly magazine.

Dental hygiene. — Preventive and remedial dental treatment is being undertaken by the Health Department on an increasingly large scale. Forty-two permanent dental officers are stationed in different parts of the Dominion and forty-eight more are being trained at the expense of the government. A continuous supply is provided for, and an un-

usual method of training has been adopted. Specially selected young women undergo an intensive course of dental training for two years, specializing in preventive measures and in filling and extracting children's teeth. Not only do they receive free tuition; they are also paid maintenance allowance. On the completion of the course they are classed not as dentists but as dental nurses, and are not permitted to practice privately. The scheme has been publicly approved by such a famous authority as Dr. W. J. Mayo, of Minnesota, and has excited interest in several countries. When the plan was inaugurated about five years ago, it was opposed by the dental profession, but the New Zealand Dental Association has since indorsed the scheme and has strongly urged its extension. The public demand for additional clinics is so great that the authorities cannot adequately meet it. The government was forced to action by the urgency of the children's needs and the impossibility of securing the services of a sufficient number of qualified dentists. It was noted, too, that the employment of dentists would be an economic waste, as less than 25 per cent of their qualifications would be utilized in treating children. Furthermore, it was found that a woman gains the confidence of children more quickly than a man. Experience proves that during the two years' training, dental nurses get infinitely more practice in their special work than dental students can obtain in that particular work during their five-year course. The work of dental nurses is carefully inspected at frequent intervals by a dental surgeon, and the success of the scheme is an established fact.

Infant mortality. — New Zealand occupies the proud position of having the lowest infant mortality in the world. Forty years ago it was twice as high as it is now. Last year it was only 40.16 per 1000 for children under the age of one year. This phenomenal reduction is due partly to the train-

ing and compulsory registration of maternity nurses, partly to the legislation relating to infant-life protection, but mainly to the fine instruction in mothercraft given by the Plunket Nurses. These highly trained experts are employed by a state-aided philanthropic society which is directed by an eminent medical specialist, Sir F. Truby King. Mothers and expectant mothers may visit these nurses at their rooms, or may be visited in their homes. The nurses' services are given free of charge. Dr. R. M. Woodbury, of the Children's Bureau of the United States Department of Labor, recently visited New Zealand to investigate the causes of the low rate of infantile mortality, and has published a valuable bulletin dealing with the situation.

CHILD WELFARE

The Child Welfare Branch of the Education Department provides for the maintenance, training, and general upbringing of all neglected, homeless, and orphan children committed by the Courts to the care of the State; for the training of delinquent children and juvenile offenders and for the supervision of all young persons, male and female, placed on temporary probation by the Courts; for the supervision of all infants under the age of six years maintained apart from their parents, or adopted with premium or payment; for the general supervision of children for whose upkeep pensions are paid under the Widows' Pension Scheme, and for the education and maintenance of all afflicted children who are deaf, blind, feeble-minded, or have speech defects. Generally speaking, the officers of this branch of the Education Department deal with all children who require special care, or who, on account of some affliction or antisocial characteristics, are not fitted to attend the ordinary public school or to remain at home with their parents. The Department deals with the maladjusted child in his own home as far as practicable,

with provision in serious cases of conduct disorders for residence for short periods in small homes established for the purpose.

The Child Welfare Act provides for the supervision of all children engaged, before or after school hours, in the delivery of newspapers, milk, or other commodities. It forbids the employment of children under 12 years of age and restricts the hours that children over 12 can be employed, either in vending newspapers, etc., or in the sale of sweets, programs, etc., in places of public entertainment.

Under the provisions of the Infants Act all infants who are maintained apart from their parents or guardians are supervised by the officers of the Child Welfare Branch, and it has been the experience of this branch that in the case of illegitimate infants supervised, the death rate has been very much lower than the rate among the infants who are not under the supervision of trained nurses and social workers. In consequence of this the Child Welfare Act makes provision for the immediate notification of all illegitimate births to the Child Welfare officers and for intervention and supervision if necessary, in cases where this is considered to be in the best interest of the child.

UNIVERSITY EDUCATION

The University of New Zealand is a state-supported institution working under a royal charter. It is not a teaching body, but prescribes courses of study, conducts examinations, and awards degrees, diplomas, and certificates. Degrees of all kinds, except theological degrees, are awarded. The various curricula are generally similar to those of other British universities of the newer type.

The actual teaching is done in four autonomous affiliated university colleges, situated respectively at Auckland, Wellington, Christchurch, and Dunedin. The first- and the last-

named are about 850 miles apart and the other two lie between them. This wide distribution of the Colleges gives easy and inexpensive access to a large number of students. The total number of university students last year was 4236.

Radical changes in the organization of the university and its affiliated institutions may be expected as a result of the recent report of the Royal Commission referred to elsewhere.

University education is free to any student who with certain restrictions completes a satisfactory high-school course of at least four years.

WORKERS' EDUCATIONAL ASSOCIATION

The Workers' Educational Association, which was founded through the coöperation of the University of Oxford, England, and societies composed largely of working men, extended its activities to New Zealand in 1915. The object of the movement is to place cultural education of university standard within the reach of anyone who wishes to pursue learning for its own sake. Vocational subjects, examinations, and diplomas have no part in the arrangements. Large numbers of enthusiastic students attend the classes and the summer camps, where much excellent work is done.

The classes are financed partly by voluntary contribution and partly by government grants and subsidies. They are held under the auspices of the University and the university colleges. The association publishes a monthly magazine, *The Highway*, which is a valuable aid in the work.

STATISTICS

Elementary education. — The total enrollment in 1924 in the 2574 public elementary schools was 213,920 as compared with 193,900 in 1919, and the average attendance amounted to 193,891 or 90.6 per cent of the average weekly enrollment.

The number of private elementary schools was 395 with an enrollment of 26,302 and an average attendance of 88.5 per cent. The public schools employed 5822 teachers (1949 men and 3873 women); of these 84 per cent were certificated, a marked increase since 1920 when the percentage of such teachers was 72.

Secondary and technical education. — The total number of pupils receiving secondary education was 23,276 at the end of 1924 as compared with 22,118 in 1923. These pupils were distributed as follows :

	NUMBER	PUPILS
Secondary schools	37	12,010
District high schools	73	2,900
Technical high schools	14	5,369
Registered private schools	30	2,473
Secondary schools for Maoris	—	524

Of the total number of pupils enrolled in government secondary schools 18,893, or 93 per cent, held free places entitling them to free education.

Technical classes were conducted in 57 centers and were attended by 14,243 students taught by 274 full-time and a large number of part-time teachers.

Higher education. — The number of students enrolled in the University of New Zealand in 1924 were 4236, distributed as follows: Auckland University College, 1103; Victoria University College, 989; Canterbury University College, 1024; Otago University, 1120. The students taking definite courses were grouped as follows :

Arts	1503	Music	76
Science	371	Engineering	347
Medicine	325	Agriculture	14
Dentistry	118	Home economics	65
Law	586	Architecture	24
Commerce	279	Journalism	30

The total number of students has more than doubled since 1915 when the enrollment was 2039. Free tuition was enjoyed by 41 per cent of the students in 1924.

Cost of education. — The cost of education in 1924 amounted to £3,654,301, of which all but a small percentage was met by Parliamentary appropriations :

General administration	£34,522
Elementary education	2,432,880
Secondary education	363,836
Technical education	194,494
Training, college, etc.	204,869
Higher education	149,429
Native schools	72,490
Schools for the deaf	5,629
Education of the blind	15,128
Schools for the feeble-minded	8,886
Industrial schools and probation system	85,247
Material and stores	5,759
Miscellaneous services	81,132
Total	£3,654,301

CURRENT PROBLEMS

Four important surveys have recently been made :

(1) A searching inquiry into the question of mental deficiency and delinquency was recently made, and far-reaching reforms in our methods of dealing with mental defectives and delinquents are likely to result from the Report.

(2) Mr. Frank Tate, Director of Education for the state of Victoria, Australia, made a survey of our technical and secondary schools and has recommended many improvements which will doubtless be carried out.

(3) A Royal Commission composed of Sir Harry Reichel, of the University of Wales, and Mr. Frank Tate, of Victoria, Australia, made a very thorough investigation of our university system and recommended drastic alterations, many of which will probably be put into effect.

(4) A committee appointed by the government looked into our arrangements for agricultural education and recommended that forward steps in several directions should be taken with a view to increasing the efficiency of our farmers and our experts. New Zealand is predominantly an agricultural country, and the authorities are fully alive to the importance of keeping this branch of education abreast of modern ideas.

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SCOTLAND

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SCOTLAND

INTRODUCTION

Scottish education has its roots so deeply fixed in the past that one or two historical clues are desirable to much that is typical and distinctive. The first attempt in any European country to secure by state intervention an education directed to secular ends was made in Scotland. This was in the year 1496, when an act was passed which made education compulsory for the eldest sons of barons and freeholders of substance, in order that they might be able to administer the laws.

Although there were parish schools prior to the Reformation, it was John Knox who, in his First Book of Discipline, 1560, first outlined the generous scheme which has been the ideal of Scottish education ever since: a national system graded from infant room to university, obligatory upon all classes of the community. Promotion from one grade to another was to depend upon capacity and education was to be free to the poor pupil of good ability. Although not realized in his lifetime, Knox's ideal remains the almost reached goal of to-day — a national education from nursery to university, free to all, rich or poor, who have the ability to profit by it.

For three hundred years, from 1560, education was under clerical supervision and control; and the old parish schools were eminently successful in producing scholarship of the highest order. This is typical of Scottish education, that in every parish for hundreds of years back there has been a

school to which a boy might go as an infant and remain until he was fit to enter the university. Primary and secondary education were not separated or divorced but were and have always remained one and indivisible.

By the Statute of 1872, which transferred the management of education to school boards popularly elected in every parish, Parliament enacted that the standard of education would be maintained at as high a level as before. The Act of 1908 gave legislative force to the new conceptions of education as "being concerned with every aspect of child life and no longer with mere schooling," with moral and physical welfare, health, nutrition, clothing, and employment, as well as the three R's. The administration of education had become a great department of social welfare. The Act of 1918 carried forward the process of enlargement. It added to what has been already indicated as the concern of official education, continuation and technical classes for postschool instruction and included technical and university education and made possible closer coördination between these institutions.

ADMINISTRATION OF EDUCATION

Central authority. — The national system of education in Scotland is under the control of a central authority or state department called the Scottish Education Department. This is a committee of H. M. Privy Council appointed by the Crown from time to time. The Lord President of the Council is President of the Department and the Secretary for Scotland is Vice-President. The Secretary for Scotland is the political head of the Scottish Education Department, and represents its needs in Parliament. He is a member of the Government and changes with the Government. The chief executive officer of the Department is the Secretary, who is a member of the civil service with continuity of office

independent of political changes. The chief function of the Department is to supervise the administration of the Education Acts by the local education authorities. From time to time the Department issues regulations dealing with the organization of schools and the curricula at the various stages of education. They also arrange for the allocation of grants from the state funds.

Local authority. — Unlike England, Scotland has had, from 1872, an *ad hoc* local authority. Up to 1918 the local authorities were elected on a parish basis. This resulted in there being 947 local education authorities or school boards in the small country of Scotland. By the act of 1918 these were swept out of existence and in their place there came an education authority for each of the four large towns (Glasgow, Edinburgh, Dundee, and Aberdeen), and each of the 33 counties, making a total of 37 local education authorities in Scotland. The work of these education authorities is to administer locally the education acts which are cited collectively as the *Education (Scotland) Acts 1872 to 1925*. Certain other obligations are laid upon education authorities by the *Employment of Children Act, 1903*, the *Prevention of Cruelty to Children Act, 1904*, the *Children Act, 1908*, the *Mental Deficiency and Lunacy (Scotland) Act, 1913*, and several subsidiary acts. These acts combined form the charter of the various local education authorities.

School-management committees. — To preserve the local interest of small communities in the schools in their area and in continuation of the parish tradition of the Act of 1872, the Act of 1918 placed it as a duty upon education authorities to prepare and submit to the Department for approval schemes for the constitution of school-management committees, *i.e.*, committees for the management of schools or groups of schools under their control throughout their education area. Every such scheme must contain provision for

due representation on the school-management committee of (a) the education authority, (b) the parents of children attending the schools under the management of the committee, (c) a representative appointed by the teachers engaged in the schools and in certain cases a representative in whose selection regard should be had to the religious beliefs of parents of the children, and (d) in the case of a county, representatives from town and parish councils or persons otherwise qualified to represent local interests.

The powers of these school-management committees are subject to restriction and regulation by the education authorities and vary considerably over the country. They may include all the powers and duties of the education authorities, except that the authorities cannot divest themselves of their powers and duties in regard to general control of expenditure including (a) the raising of money by rate or loan, (b) the acquisition or holding of land, (c) the appointment, remuneration, and dismissal of teachers, (d) the appointment of bursars, etc., and (e) the establishment, etc., of intermediate or secondary schools.

The usefulness of these school-management committees is a matter of some doubt and there is a considerable body of opinion in favor of their abolition. The Association of Education Authorities, for example, has resolved that it is desirable that the clause in the Act of 1918 giving full powers and duties to a school-management committee having under its management a secondary school should be repealed and further that the clause laying a duty upon each education authority to arrange for the appointment of school-management committees should be made permissive.

Advisory councils. — (a) An Advisory Council has been set up by the Privy Council acting under authority given by the Act of 1918. This Council consists, as to not less than two thirds of its members, of persons qualified to represent

the views of various bodies interested in education. Its purpose is to advise the Department on educational matters. Any advice or representation submitted to the Department by the Council must receive consideration.

(b) It is required of every local education authority to establish a local advisory council consisting of persons qualified to represent the views of bodies interested in education, for the purpose of advising the authority on educational matters relating to the education area. Its advice when given must receive consideration. Excellent in idea, these advisory councils, at least so far as the local bodies are concerned, have not wielded the influence on educational administration or development that was anticipated.

Educational finance. — Scottish education being based on compulsory and non-fee-paying principles, the expenses of its administration are a charge on the public purse. From this purse education authorities obtain their funds through two channels: (a) national or imperial grants and (b) local taxation.

The national or imperial grants are paid to the authorities by the Scottish Education Department out of a fund known as the Education (Scotland) Fund. This fund is created by Parliament and is composed of certain fixed amounts voted annually from the national exchequer and of other sums which vary. Notably there is a contribution thereto of $11/80$ ths of certain expenditure in England and Wales — a proportion which is based on population. The effect is to make the Scottish Education Fund dependent to some extent on the finances of English education. The grants paid from the fund to the local education authorities are calculated in accordance with rules laid down from time to time by the Department. The following is the basis of calculation for the current year :

(a) £4 3s. for every pupil attending school or continuation classes conducted by the authority ;

(b) £126 10s. for every teacher employed in these schools or classes ;

(c) £110 for every student from the authority's area who has completed the teacher's training during the year ;

(d) A sum varying from £65 to £25 for small schools of from 20 to 100 scholars.

The number of scholars attending school is taken to be the average number on the registers throughout the year.

The grants paid by the Government from the national funds do not, however, do much more than meet half of the local cost of education incurred by the local authorities. The deficit is met by the levy of an education rate in each parish. The method of collection is as follows : The education authority, after ascertaining its estimated deficit, passes a precept upon each parish council in its area. The parish council then levies the necessary rate to raise the sum required, collects it, and hands it over to the education authority. It is a system which has its defects. These constitute, however, but one aspect of a larger question, viz., the question of local rating in general which is engaging the attention of Parliament at the time of writing.

The proportion which government grant bears to local rates varies within limits in each individual area in accordance with the policy of the respective education authorities. Over the whole country for the year ended May 15, 1923, the total net expenditure, *i.e.*, excluding balances from the previous year, was met thus : grants from the Scottish Education Department, £5,928,411 or 57.2 per cent ; raised locally from rates, £4,442,322 or 42.8 per cent ; total, £10,370,733 or 100 per cent.

In the year ended May 15, 1924, corresponding figures are : grants from S. E. D., £5,583,896 or 55.2 per cent ; rates, £4,532,550 or 44.8 per cent ; total, £10,116,446 or 100 per cent.

The above refers only to current expenditure. Capital expenditure, *i.e.*, on purchase of sites, erection, enlargement or alteration of school buildings, is the subject in each particular instance of application to the Department for approval before it may be incurred. Capital expenditure is met, as a rule, by loan from the Public Loans Board or raised in the open market. Repayment of these loans from revenue is spread over a long period of years.

TABLE SHOWING THE TOTAL INCOME AND EXPENDITURE OF EDUCATION AUTHORITIES IN SCOTLAND

Expenditure	1923-24	1922-23
Salaries of teachers, day schools	£6,757,503	£6,785,655
Salaries of teachers, continuation classes . .	215,456	205,297
Retiring allowances of teachers (Supplementary to superannuation scheme)	48,580	48,306
Education authorities contributions to super- annuation scheme	135,948	—
Other maintenance expenses of day schools	1,552,345	1,551,386
Other maintenance continuation classes . .	44,391	42,951
Bursaries	224,961	222,259
Medical examination and treatment	124,600	123,031
Meals and clothing	49,734	84,418
Conveyance and maintenance of defective children	62,910	63,712
Reformatory and industrial schools	54,395	62,640
Loan charges	557,498	568,102
Administration expenses	359,830	363,689
Other expenditure	300,084	396,583
	£10,488,235	£10,518,029
Income		
State grants	£5,583,896	£5,928,411
Local taxation	4,532,550	4,442,322
School fees	171,140	173,052
Endowments	29,051	29,102
Other sources	57,457	70,583
	£10,374,094	£10,643,470

Inspection and supervision. — This is in the hands of the inspecting staff of the Scottish Education Department. For

this purpose the country is divided into four divisions: Southern, Western, Northern, and Highland.

Each division is under a chief inspector with assistants. There are six officers with the rank of chief inspector, one of whom is the chief inspector for the training of teachers. The inspectors of schools number 37 and there are 15 subinspectors. In addition there are 5 inspectresses of domestic subjects and one medical officer and inspector of physical training. The ranks of the inspectorate are to a considerable extent filled from the teaching profession — school and university.

In regard to each individual school, schemes of work and time tables showing the classification adopted and time allowed to the main heads of instruction are submitted to and approved by the inspector. Head teachers may make slight deviations from the scheme of work or time schedule, provided an appropriate entry is placed on the school log-books. Major alterations require a fresh submission and renewed approval. The inspector may visit schools at any time without notice and report defects in teaching and method.

The reports of the chief inspectors submitted to the Department are issued to the public. They constitute an illuminating commentary on the administration of education in the schools from the official point of view.

Special features of the system. — To a fuller understanding of the distinctive features of Scottish education the mention of certain preliminary considerations will assist:

1. Compulsory education in England and Scotland dates back for more than fifty years. But whereas in England legislation provided for the education of the children of the class that supported itself by manual labor, in Scotland the legislation took into its purview the whole youth of the country and all education both primary and secondary.

This difference has persisted through the developments of the subsequent years and to-day, though the two countries form one small island under one government, their educational systems present widely varying features.

2. Scottish education as it exists is based on the Education (Scotland) Acts, 1872 to 1925. Its distinctive features are: (a) The provision of systematic education for all young persons. The inclusion of all those between the ages of 2 and 18 years is contemplated. It takes the infant from his cradle and carries him right to the door of the university.

(b) The establishment of all forms of school education — primary, intermediate, and secondary — on a non-fee-paying basis.

(c) Secondary education is not only to be free but encouraged by granting the deserving and suitable pupils bursaries, maintenance allowances, and traveling expenses.

3. In its desire to have but one complete inclusive system of education throughout the country, the Government made it the aim of education legislation to affect the coördination of all agencies concerned with the care and education of children. When the 1918 Act was passed there were, in addition to the public board schools, numerous schools belonging to and managed by private bodies, notably the Roman Catholic and Episcopal Churches. These schools were inspected by the Government inspectors and received state grants but were not assisted from local taxation. By 1921 the education authorities were under obligation on application by the managers thereof to take over these schools either by lease or purchase. As a result Roman Catholic, Episcopal, and other voluntary schools have been transferred to the education authorities under express safeguards which preserve use and wont in the matter of religious instruction or observance. These schools are known as the "transferred" or "denominational" schools, as opposed to

the original schools of the old school boards — the “ non-transferred ” or “ undenominational.” This arrangement and its issue in fact has completely obviated the religious difficulty which exists in England.

4. Examination tests are also under government or departmental control. In the course of public school education there are four main examinations :

(a) *The qualifying examination.* This is a test which is applied to all elementary scholars at the age of 11–12 years and is devised to assess the capacity, proficiency, and attainments of the highest classes of the senior divisions of the primary schools with a view to their admission to a post-qualifying course of instruction either in advanced divisions or a secondary school.

(b) *The day-school certificate (lower).* This is a certificate which is awarded on school-work records, duly submitted to H. M. inspectors, to pupils who have completed a two-year course of postqualifying instruction.

(c) *The day-school certificate (higher).* This certificate is awarded after examination conducted by the Scottish Education Department to successful pupils who have completed an approved three-year course of postqualifying instruction and who are on the point of leaving school.

(d) *The leaving certificate.* This certificate is awarded after examination conducted by the Department to successful pupils who have completed a five- or six-year course of postqualifying instruction. This certificate is the apex of the Scottish school system and its award is the goal towards which all instruction is directed. Its possession is a key which opens the door to the universities and the learned professions generally.

5. *Training and certification of teachers.* Not only is education provided, inspected, and tested under Government but the staff employed in the schools is almost without excep-

tion trained in and in every case certificated through state regulated and supported training colleges.

PRESCHOOL AND KINDERGARTEN EDUCATION

Of the provision of facilities for education prior to the compulsory age of five it is difficult to write with confidence. The latest returns, those for the school year 1923-1924, indicate that throughout Scotland there were on the registers of the primary schools 5512 children, of whom 27 were in attendance at special schools or classes. The majority of these would doubtless be children just under the school age and as such merely in the infant classes of an elementary school, although in some instances, notably in the larger cities, quite a few would be pupils in a genuine nursery school or kindergarten.

The School Codes issued by the Scottish Education Department have for many years contemplated the possibility of school authorities making provision of an educational nature for children of three years of age and upwards and the records of twenty years ago show that a greater number of children of tender years was enrolled then than now. It was not, however, until the passing of the 1918 Act that the nursery school was expressly referred to in the country's educational legislation, when education authorities were authorized to supply or to aid in the supply of nursery schools for children between two and five years of age, whose attendance at such a school is necessary or desirable for their healthy physical and mental development. Power is also given to the authorities to attend to the health, nourishment, and physical welfare of children attending nursery schools. The basis of nursery schools is thus mainly a social one, and figures are not yet available, except to the extent quoted above, to show how education authorities are taking advantage of their statutory powers in this respect.

A problem was created by the Great War for which, especially in large industrial centers, the nursery school in combination with hostels was the obvious solution. The problem here also was a social more than an educational one. The orphans of soldiers and sailors who had lost their lives in battle had to be both cared for and educated. The stress of postwar economic conditions forced many a widow and many a wife whose husband was unemployed to go out to work. While their children have homes to return to at nightfall, the absence of the mother throughout the day constituted an urgent social problem. The solution found by education authorities was the establishment of hostels where such school children received three meals a day, morning, noon, and night, only returning home when their parent had also returned from work. The hostels are under the care of suitable guardians and payment is made for the meals supplied in accordance with the household means. In combination with these hostels the nursery school is run for the preschool members of the family. The older children bring the young ones with them, arriving at the hostel at 7.30 A.M. They obtain breakfast, dinner, and supper in the hostel, attending school in the usual way — the preschool child in a nursery class — and return home again between 6 and 7 in the evening. Although this is a postwar innovation, its need in the larger cities is such as to justify its permanence solely in the interests of the children. The latest report of the Glasgow Education Authority (session 1924-25) indicates that there are in the city 855 children on the roll in the 14 hostels and 199 children in nursery schools.

ELEMENTARY EDUCATION

Compulsory attendance. — It is the duty of the education authority to provide sufficient accommodation in public schools for all persons resident in their area who are not

being efficiently educated otherwise. It is also their duty to prepare for the approval of the Scottish Education Department a scheme for the provision of all forms of primary, intermediate, and secondary education in day schools without payment of fees. On the other hand, it is the duty of every parent to provide efficient education for his children when they are between the ages of 5 and 14 years. Under statute the upward limit has been increased to 15 years, but the statute has not yet been enforced. A parent is relieved of his obligation to educate if he has a reasonable excuse in the statutory sense, or if his children, being over 13 years of age, have obtained exemption from the education authority.

The following are reasonable excuses under statute: (a) that his children have been prevented from attending school by sickness or other unavoidable cause; and (b) that there is no public or inspected school within three miles by the nearest road from their residence.

If he has made arrangement for their efficient education otherwise, a parent is not obliged to send his children to school. If he does send them to school, he must send them to the school designated by the education authority as the school for the area in which he resides. As the law stands at present, there is a slight anomaly, for a parent who is prosecuted for noncompliance with an attendance order issued by the authority is permitted by law to select his school, while if the prosecution proceeds merely for failure to provide efficient education, he is under obligation to send his children to the school selected by the education authority. So far as religious instruction is concerned a parent may withdraw his children from any instruction or from any observance of which he does not approve.

Education authorities appoint attendance officers whose duty it is to see that absences from school are covered by reasonable excuses and to report in case of failure to educate.

These are dealt with as indicated above. The following table shows the attendance at primary schools from the school year 1914-15 to the school year 1923-24 :

ATTENDANCE AT PRIMARY SCHOOLS

	Estimated population	Average number of scholars on registers	Average attendance	Percentage of 3 to 2
1914-1915	4,883,959	716,170	638,014	89.09
1915-1916	4,915,216	711,833	628,981	88.36
1916-1917	4,946,673	710,471	628,360	88.44
1917-1918	4,978,331	709,094	626,182	88.31
1918-1919	5,010,192	705,990	611,232	86.58
1919-1920	5,042,257	706,968 ¹	620,218 ¹	87.73
1920-1921	4,882,497 ²	706,553 ¹	626,682 ¹	88.70
1921-1922	4,904,456	696,894 ¹	615,198 ¹	88.28
1922-1923	4,901,100	676,271 ¹	606,876 ¹	89.74
1923-1924	4,881,637	655,557 ¹	586,803 ¹	89.51

¹ The numbers after 1918-1919 are reduced by the exclusion of the attendance in certain preparatory departments of secondary schools, which are no longer classified under primary schools.

² Actual population according to census returns.

Size of classes. — The maximum number of elementary school children who may be habitually under the charge of one teacher is still retained at 60. This number is retained only temporarily and provisionally as a maximum for existing schools, since the general circumstances of the time do not appear to offer favorable conditions for its immediate reduction. In new schools or in alterations of existing schools no classroom will be recognized by the Department as accommodating more than 50 pupils. While that represents the official position at the moment, certain modifications are insisted upon. In particular the number of scholars under charge of one teacher shall not exceed: (a) in an advanced division — 40; (b) in a special class for blind children — 15; for deaf and mute children — 10; for defective

or epileptic children — 20 ; (c) in a class for practical instruction in science, bench-work, and various other practical subjects including dairying and navigation and seamanship — 20. Demonstration lessons in these classes may be given to pupils up to the number of 40.

Qualifications of teachers. — The qualifications of all teachers must be approved by the Department and as a rule no teacher is approved who does not hold a definite qualification under some article of the official *Regulations for the Training and Certification of Teachers*. So far as music, drawing, needlework, and educational handwork are concerned, the staff of a school is not in normal circumstances regarded as sufficient unless it contains an adequate proportion of teachers whose qualifications to teach these subjects are attested in the manner laid down by the *Regulations*. Teachers employed in advanced divisions to give instruction in any subject other than practical subjects must have their attainments and qualifications specially approved as appropriate to the stage of the subject in which they are engaged. In special schools each teacher must be individually approved by the Department with reference to the particular duties to be performed.

Organization and curriculum. — The Departmental *Regulations* are as follows :

A. The following is contemplated as the normal organization of a school: (a) infant division, providing instruction suitable for children under 7 years of age ; (b) junior division, providing instruction suitable for children between the ages of 7 and 9 ; (c) senior division, providing instruction suitable for children between the ages of 9 and 12 ; (d) advanced division, providing instruction suitable for scholars over 12 years of age.

The arrangement of work within each division and the classification of the children may vary according to the circumstances of the school, but shall be such as to afford due

opportunity for promotion from class to class and to secure the advancement of the instruction by easy gradations to a standard appropriate to the average age and capacity of each class. Every effort should be made to discover individual children who show promise of exceptional capacity, and to develop their special gifts, so far as this can be done, without sacrificing the interest of the majority of the children.

B. (I) The scheme of work shall make provision for the instruction of the scholars in: (a) First and principally, the use and understanding of spoken English, and the three subjects of reading, writing, and arithmetic. (b) The study of English prose and verse suited to the age of the scholars, and the committing to memory of passages of literary merit. (c) Adequate physical exercises according to a system approved by the Department. (d) Singing by note, except where His Majesty's inspector shall recommend that this condition be not insisted upon.

(II) The scheme of work for the infant, junior, and senior divisions shall also make provision for instruction in drawing (with or without manual occupations).

(III) In addition, the scheme of work for the junior and senior divisions shall make provision for the instruction of all scholars in nature study and geography and for the girls in needlework.

(IV) The scheme of work for the senior division shall further make provision for instruction in written composition and history.

(V) The scheme of work for the advanced division, *vid. inf.*

(VI) In Gaelic-speaking areas the scheme of work should also make reasonable provision for the instruction of Gaelic-speaking children in their native tongue.

Within the limits outlined above considerable freedom is permitted and every encouragement given to individual teachers to develop their work according to their individual

desires. The following is given in a recent report of the education authority of Glasgow as the time table of an up-to-date infant department in that city :

I. Activities.

(a) Playful activities.

1. Directed play by teacher or children.
2. Games and play-drill movements.
3. Dramatization.
4. Music.
5. Apparatus work.
6. Other activities, such as " free play."

(b) Constructive activities.

1. Construction with bricks, plasticine, sticks, seeds, beads, textiles, etc.
2. Sand-tray play and work.
3. Picture making — drawing.
4. Printing, writing, and figuring.

II. Modes of expression.

(a) English.

1. Conversations on
 - (i) Daily activities of children.
 - (ii) Interests of children.
 - (iii) Pictures and picture books.
2. Stories, poems, and rhymes.
3. Phonics and reading.
4. Dramatization.

(b) Music.

1. Vocal gymnastics, breathing, voice training, and articulation exercises.
2. Singing of nursery rhymes, finger plays, " hush " and action songs.
3. Imitation and ear tests ; hand signs and musical stair.
4. Appreciation of good music by listening to pieces played on dulcitone, etc.
5. Rhythm through games and dancing with music.

(c) Applied number in connection with occupations and daily work.

III. Nature experiences.

- (a) Daily observations — toy weather house, etc.
- (b) Talks about children's "treasures" brought to school, *e.g.*, shells, feathers, stones, flowers, etc.
- (c) Classroom pets — doves, caterpillars, tadpoles observed, fed, and tended.
- (d) Classroom flowers and plants watered and tended under teacher's supervision.
- (e) Classroom garden (miniature) planted, observed, and cared for under teacher's supervision.
- (f) Hygiene and care of self — simple talks and daily "toilet" song at close of session (forenoon).
- (g) Special sense-training exercises and games.

Religious training, morals, and manners — every morning.

Training in personal cleanliness — every morning and afternoon after registration.

INTERMEDIATE EDUCATION

There is now no definitive class of schools known under the official *Regulations* as intermediate schools, but the term *intermediate* provides the most useful description of education at a certain stage in the pupils' career. The Scottish system makes provision for a "qualifying" test at the age of 11 to 12 years. Postqualifying education is thereafter provided along two routes: (a) for those mainly who intend to leave school at 14 years of age by means of "advanced divisions," which are officially regarded as the highest classes in an elementary school, and (b) for those who may go to a secondary school, the first three years of which may be regarded as an *intermediate* course. For the sake of clearness in definition, the advanced divisions and the first three years of a secondary course are taken here as included in the term *intermediate*. Advanced divisions are of recent creation. Prior to 1923 provision was made for supplementary education beyond the qualifying stage, and there was no opportu-

nity for transferring a bright pupil who obviously might benefit by secondary education from the supplementary classes to the secondary school. The following statements, taken from the official reports of H. M. inspectors of schools in Scotland, indicate the nature and purpose of these courses :

The main differences between the old organization and the new are two — difference in duration and in the character of the curriculum. Whereas the supplementary course might be completed successfully in one year, and the appropriate certificate awarded, the new organization contemplates courses extending over one, two, and three years, with appropriate certificates in the last two cases only. This extension of the duration of the courses necessarily carries with it a readjustment of the curriculum on wider and more distinctly progressive lines ; and this in turn, if the desirable level of efficiency is to be attained, involves a reconsideration of the staffing and the substitution for the one-class-one-teacher principle of a greater measure of specialized instruction.

The courses are meant to provide, for pupils whose bent is not towards literature or the professions, a more practical course of study which shall be comparable in value to that provided by the normal intermediate course. They have a vocational bent — that fact is indicated by the names “commercial,” “industrial,” etc. — but they are in the first place and essentially courses which provide a good general education. Cultural subjects, therefore, and above all English, occupy something like three fourths of the time-table. For the class of pupil whose needs they are framed to meet advanced-division courses should be far more beneficial, in regard both of culture and of utility, than a three-years’ course on secondary lines.

The tendency is all towards an unbroken stream of education extending from the infant room to the doors of the university, with a double channel at the intermediate period and means of transfer between these two channels at suitable intervals.

Curriculum and courses of study. — The official *Regulations* in regard to advanced divisions are as follows :

The Schedules that follow are intended as suggestions to assist education authorities in framing courses for advanced divisions. The first and principal aim must be the continuance and development of general education on the moral and physical, no less than on the intellectual, side. It is, therefore, essential that every course should provide for training in morals and citizenship, for music and for physical exercises. Intellectual training can best be secured through a proper discipline in a select number of the branches specified below. The main instruments here will be the English subjects, together with mathematics and science, and, as a rule, drawing. These should accordingly be studied throughout, the amount of detail varying with the length of the course. General provision of this kind having been made for all, education authorities may reasonably proceed to take account of local conditions and of the needs and aptitudes of individual scholars, to such extent as the circumstances of each school may require, and its resources permit. The point at which any specialization that may be attempted is begun will depend partly on the length of the course and partly on the nature of the special subject to be studied. Normally, the longer the course and the more definitely vocational the subject, the later will be the period to which specialization is deferred. In one-year courses, however, if such work is to be fruitful, it will probably be advisable to arrange that it should be prominent from the outset. Every course will thus consist of an appropriate combination of subjects and will have a character of its own. That character may be allowed to color the treatment of the individual subjects included in the course. Mathematics and science, for instance, may mean one thing for boys in a seaboard school and quite another for girls in one of the large cities. Similarly, if a foreign language is attempted, the treatment of it may vary according to the broad purpose of the course, and may often with profit be wholly or mainly directed towards the acquisition of a reading

knowledge of the language and some acquaintance with the institutions of the country concerned.

First Schedule — Three-Year Course

For pupils who will remain for three years in an advanced division, graduated courses of instruction should include the following :

1. English, history, and geography.
2. Mathematics and science.
3. Drawing.
4. One or more of the following :
 - (a) Practical subjects, *e.g.*, technical drawing, benchwork, mechanics, navigation, seamanship; gardening, agriculture, dairying; needlework, design, dressmaking; cookery, laundrywork, housewifery.
 - (b) Commercial subjects.
 - (c) A foreign language.
 - (d) Any other approved subject.

Second Schedule — Two-Year Course

A. For pupils who are likely to remain less than three but not less than two years in the advanced division, graduated courses of instruction should include the following :

1. English, history, and geography.
2. Mathematics (or, for girls, arithmetic) and science.
3. One or more of the following :
 - (a) Drawing.
 - (b) Practical subjects, *e.g.*, technical drawing; benchwork; navigation; gardening; needlework (especially mending, darning, and cutting out), dressmaking; cookery; laundrywork.
 - (c) Commercial subjects (a beginning).
 - (d) A foreign language.

B. For pupils who are not likely to remain more than a year in an advanced division, the courses should provide

instruction in the subjects enumerated in A. Under heads 1 and 2, with one or two subjects chosen from 3 (a) and 3 (b).

In this treatment of intermediate education emphasis has been laid upon the advanced divisions of elementary schools almost to the exclusion of the parallel curriculum of intermediate education given by the first three years of a secondary course. The latter side of intermediate education has no official existence and is better regarded from the point of view of the initial steps in the preparation for the leaving certificate. The official attitude is thus expressed :

Where an advanced division course and a leaving certificate course are provided side by side in the same school, the common subjects are taught by the same teachers, if not in combined classes. In some of these cases schemes for three-year, and even for two-year, advanced-division courses are identical in respect of the common subjects with those of the leaving certificate course — an arrangement which has the great advantage of facilitating the transference to the leaving certificate course of pupils in whose case such transference proves to be desirable.

Qualifications of teachers. — The qualifications of teachers in advanced divisions are the same as those for the teachers in elementary schools with this exception : that each teacher requires individual approval by the Department of his attainments and qualifications in respect of the particular stage of education in his own particular subject. The general aim of the Department, as expressed in its latest *Report*, 1924-25, is to staff the advanced divisions with teachers as highly qualified as those appointed to secondary schools. In effect the present regulations in regard to the qualifications of teachers of advanced divisions and intermediate courses go almost all the way to the realization of that aim.

SECONDARY EDUCATION

A secondary school is defined by the Scottish Education Department for the purposes of the *Regulations* as a school which provides at least a five-year course of suitable education, leading to the successful presentation at their leaving certificate examination of such proportion of the pupils as may seem to the Department to be reasonable.

It is the duty of the various local education authorities to make adequate provision for secondary education in their areas and that on a non-fee-paying basis. This was laid down statutorily for the first time in Scotland by the Act of 1918. The statute even goes further and states that secondary education is to be encouraged by granting to deserving pupils bursaries, maintenance allowances, or traveling expenses. Education authorities are, however, so long as they make adequate free provision, not prohibited from setting up schools, primary, intermediate, or secondary, on a fee-paying basis.

Curriculum. — It is laid down in the Departmental *Regulations* that the curriculum

Shall extend over at least five years, and shall make provision throughout for the study of English and history. During the earlier years it shall also, as a rule, make provision for the inclusion of the following subjects, viz., geography, mathematics, a language other than English, science, and drawing. During the later years such variations of the course may be proposed as will permit of concentration on appropriate combinations of subjects. As a rule no curriculum will be regarded as satisfactory unless, after due notice given, it is found to provide opportunities for study, under competent teachers, of each of the following subjects at the choice of the pupil: Latin, Greek, French, and German.

Proposals for the inclusion in any curriculum of subjects other than those mentioned above will be entertained,

provided that they can be shown to be specially suitable in the circumstances of the school, and provided also that the curriculum is not thereby overloaded, or the time to be given to its main subjects unduly restricted.

Within these limits considerable freedom is allowed. Definite proposals for each individual school must be submitted for the approval of the Department. The aim of the curriculum is the successful presentation of the pupils at the leaving-certificate examination.

Qualifications of teachers. — The staff must be sufficient in number to admit of pupils at different stages of advancement being taught in separate classes. Except in special circumstances and with the express sanction of the Department, no class under a single teacher should contain more than 40 pupils in the first three years and no more than 30 pupils in subsequent years. As a rule more than 20 pupils may not be taken at one time for any subject or practical instruction such as experimental science. Classes for demonstration lessons in such a subject may exceed 20 but should not exceed 40.

The qualifications of all teachers in a secondary school must be approved by the Department. As a rule, no teacher is approved who does not hold a definite qualification under some article of the *Regulations for the Training and Certification of Teachers*. Nor is any person approved to give instruction in any particular subject at any particular stage unless his attainments and qualifications are deemed to be appropriate to the teaching of that subject at that stage. Normally qualification for the principal teacher of each subject will be recognition by the Department in terms of Chapter 5 or Chapter 6 of the *Official Regulations*.

In 1923-24 there were in schools conducted under the *Secondary Schools (Scotland) Regulations, 1923*, the following numbers on the registers: in preparatory departments,

STATISTICS OF SECONDARY EDUCATION

	1922-23	1923-24
Number of schools	148	148
Number of pupils		
Boys	—	25,727
Girls	— ¹	25,105
Total	47,505	50,832
Number of teachers		
Men	1,364	1,459
Women	935	1,049
Total	2,299	2,508

¹ Separate figures not available for 1922-23.

81,088, and in secondary departments, including advanced divisions, 71,881. These figures may be compared with the enrollment of 654,567 pupils in primary departments and 9398 in special schools and classes. Of the total number of pupils of school age (5-14), 744,927, there were 628,490 in primary schools, 7946 in special schools, 79,660 in preparatory departments, and 28,831 in secondary departments, including advanced divisions.

VOCATIONAL EDUCATION

This form of education is provided along two lines: (a) continuation classes under the local education authorities and (b) technical schools and colleges.

The latter of these groups provides both full-time day courses as well as part-time or evening courses. The former has part-time courses only. In some centers a joint arrangement is made by the education authority and the managers of the technical colleges so as to avoid overlapping in the courses provided.

The technical schools and colleges rank as central institutions and are the subject of government inspection and grant. They are in the main scientific engineering schools, schools of art, domestic-science schools, and commercial colleges. The total number of day students in attendance during session 1923-24 continues to show a downward tendency. In 1923-24 there were 6975 day students and 11,925 evening students, making 18,900 in all, as compared with 7157 day students and 12,492 evening students, total 19,649, in 1922-23. The total cost of maintaining the central institutions in 1923-24 was £228,331; in 1922-23 it was £230,403. The income set against the expenditure in these years was derived as to £104,201 in 1923-24 and £113,109 in 1922-23 from fees and other returns for expenditure incurred. From other local sources (endowments, etc.) the income in 1923-24 was £36,671; in 1922-23 it was £35,994. The income from grants by the Department in respect of the years 1922-23 and 1923-24 reached the figures of £85,192 and £88,953 respectively. Only one of the institutions continued in 1923-24 to be self-supporting.

Continuation Classes. — The Departmental *Regulations* contemplate the following scheme :

I. Preparatory course for pupils who have left school without obtaining the day-school certificate (lower).

II. Classes for young persons above day-school age who are unable to avail themselves of the more fully organized courses in Section III following.

III. Courses extending over at least four sessions open to pupils over 14 who desire to follow a definitely organized course and have reached at least the stage of the day-school certificate (lower) before their enrollment in the first year of the course. Students with the day-school certificate (higher) may enroll at once in the third year of the course.

IV. Classes for adults in the subjects of a liberal education.

Within the limits of this scheme, the greatest freedom is permitted to the education authorities to provide such classes as the local circumstances require. In general the earlier courses must include subjects of general education. The last two years of course III may be purely vocational. The subjects taught vary with the locality. In rural districts agriculture, care of poultry, and kindred subjects are provided. In industrial centers the subjects taught cover the whole field of trade and industry. The trade classes taught in the evenings in the technical colleges have been in the main transferred to the education authorities who are without exception prepared to establish classes in any subject suggested by employers or employees, provided a sufficient enrollment is assured. The following list of trade courses provided in Edinburgh are indicative of the scope: engineering and metal trades; shipbuilding, etc.; motor cars and vehicles; building; furnishing; printing; baking; tailoring and dressmaking; and miscellaneous.

Continuation classes are, after a period of postwar depression, beginning to make headway again. Each year sees employers in the larger centers becoming more alive to the advantages of having better educated and better trained workers. The following is taken from a report on the position in Glasgow:

Many firms insist on their young employees attending classes; some pay the fees, and others offer bonuses in the shape of increased wages for successful completion of a session's course of study. The trade unions also are becoming more and more interested in the training of the apprentice and ready to coöperate with the respective employers' associations in the formation of advisory committees, which render valuable assistance in the management of the trades classes. It is not to be understood that these advisory committees are of a recent origin; in certain trades, *e.g.*, plumbing, painting, and decorating, they date back many years.

The latest details in regard to statistics are as follows :

NUMBER OF PUPILS IN ATTENDANCE		
	1922-23	1923-24
Under 15	19,383	21,063
Between 15 and 18	46,362	47,443
Over 18	53,864	55,274
Totals	119,609	123,780

The numbers of students in attendance in each of the four main divisions of the Departmental *Regulations* are as follows :

NUMBER IN ATTENDANCE		
Division	1922-23	1923-24
I	9,926	9,932
II	55,631	58,040
III	52,427	54,253
IV	7,391	8,863

A mere statement of the number of students in attendance has admittedly, for purposes of comparison, a somewhat uncertain value, inasmuch as a student may have attended for 20 or for 200 hours ; a more significant index is provided by the local number of hours' attendance made by all the students. In the session 1922-23 this total was, approximately, 7,950,000 ; in 1923-24 it was 8,220,000.

In the latest official report attention is directed to what is described as a disconcerting feature, viz., the steady drift of enrollment from the technical to the commercial side caused by the continued depression in productive industry — the only exception being in the building trade where there is no scarcity of employment. The following is a quotation from

the report of H. M. Inspector in the Northern and Highland Division :

In recent years there has been a significant change in the general direction in which youth is heading. Classes leading to productive occupations have been diminishing in number, while classes training for the exchange of commodities have been increasing. From conversations with young men in various centers one gathers that there is a common belief that the rewards of productive industry are far from commensurate with those in distributive trades, that one never hears of a shopkeeper failing, going on short time, or reducing his staff.

Juvenile unemployment classes. — These are typical of the times and are organized in conjunction with the Ministry of Labor, which at present bears the whole cost of such classes. They are meant for young persons who have claims on unemployment benefit and in whose case it is made a condition of payment that they attend these classes. The total number of centers opened during the year ended March 31, 1925, was 51 (28 for boys and 23 for girls), and the average number of pupils in attendance during the week ended March 11, 1925, who had claims for unemployment benefit was 2262 (1371 boys and 891 girls). In addition the classes were attended by 469 pupils (278 boys and 191 girls) without such claims. These are mostly young persons between the ages of fourteen and sixteen.

TEACHERS

Training. — Prior to 1905 the training of Scottish teachers was mainly in the hands of the Churches, Established and Dissenting. Early in 1905 the Government set up provincial committees — one associated with each of the four Universities, St. Andrew's, Glasgow, Aberdeen, and Edinburgh, but independent of each other and responsible directly to the

Scottish Education Department. These committees were empowered to accept the transfer of any existing college and within a short period they had, by arrangement, assumed control of the various training colleges.

Up to 1918 these committees continued to function as above, their funds being provided solely by direct government grants from which were defrayed the costs of training and maintenance allowances to trainees. The Act of 1918 altered their position and threw the burden of maintenance grants to trainees upon the local authorities and also required each of them to make an annual contribution towards the cost of training, the contribution to be proportionate to the number of qualified teachers in the authority's service. On the other side the Government in 1920 gave the authorities a measure of control over the training of teachers by setting up a National Committee composed of representatives of the education authorities.

Since 1920 this Committee, which has the widest possible discretion, has developed its interest and its control until to-day every institution in Scotland concerned with the training of teachers has been brought within its purview. It is the outstanding feature of the training of teachers in Scotland that over the whole country it is in the hands of a statutory body whose composition is in the last resort democratically controlled.

In 1906 the entrance to the profession through the ranks of the pupil teachers was discontinued and a system of junior studentship substituted, the scholastic demands of which were distinctly lower than the standard for entrance to a university. This was recognized as a temporary expedient; and accordingly the *Regulations* of 1924 provide that

... as soon as the crop of junior students at present ripening is exhausted none save holders of the leaving certificate or its equivalent shall be accepted by training

authorities as candidates for entrance. The net result is that, so far as preliminary qualifications are concerned, teaching will presently stand on as high level as any of the other professions, and on a distinctly higher level than some of them.

Further, after 1926, every man who desires to train for the teacher's general certificate will, besides possessing a leaving certificate, be required in normal circumstances to be a graduate of a university.

Preliminary training. — Education authorities, acting on reports from head teachers, may nominate suitable pupils for preliminary training in the art of teaching. These pupils must have satisfactorily completed the first three or four years of an approved course for the leaving certificate. The preliminary training will extend for a further two or three years, as the case may be, and will consist of instruction and practice in conjunction with the pursuit of some one of the courses of general education approved for the purpose of the leaving certificate. When the students have satisfactorily completed their preliminary training, their leaving certificates are indorsed accordingly by the Department.

Subsequent training. — This is in the hands of the National Committee acting through the various provincial committees and other bodies as managers of the training colleges. The qualification for admission to training for the teacher's general certificate is, generally speaking, the holding of an indorsed leaving certificate or the possession of a university degree. The duration of the course varies from two years for women with an indorsed leaving certificate (which may be extended to three or four years by attendance at a university or recognized institution) to one session for university graduates who hold the same certificate. Without such a certificate graduates must undergo training for a period of not less than forty weeks.

Curriculum. — For purposes of professional training the curriculum includes instruction in school and personal hygiene including physical exercises, in the principles of teaching (including psychology, ethics, and logic, in their direct bearing upon the work of the teacher), in school management (discipline, organization, and general method), in methods of teaching the several subjects of the primary school curriculum, in the history of educational systems and theories, and in phonetics and voice training (speaking and reading). It shall further provide for every candidate for the teacher's general certificate adequate practice in teaching, under proper supervision, each of the subjects of the primary-school curriculum. These requirements being met, the curriculum may provide, to such extent as training authorities may determine, for the revisal or the development of the student's knowledge of the subjects of general education.

Certification. — There are in the main three certificates which the teacher may hold :

1. *The General Certificate*, for which the foregoing curriculum of training prepares. This is professionally known as a Chapter-III Qualification, *i.e.*, under Chapter III of the *Official Regulations*.

2. *Certificate of Qualification to Teach Certain Special Subjects.* — The special subjects included are English, history, classics, modern languages, mathematics, science, geography, and economics. The certificate may be granted alone or in addition to the General Certificate and may be for any of these subjects. Graduates with honors are admitted to training for this special qualification. Candidates for a modern foreign language qualification must have studied in the particular foreign country for at least one year. This qualification, known as a Chapter-V Qualification, is required of secondary-school teachers.

3. *Certificate of Qualification to Teach Certain Technical Subjects.* — The basis of this qualification is normally the diploma of a recognized technical institution which provides a course of training approved by the Scottish Education Department, and the subjects include art, applied science, agriculture, commerce, domestic economy, physical education, craftsmanship, and music. Holders of this certificate, known as a Chapter-VI Qualification, are not recognized as teachers of general subjects; a teacher qualified under Chapter III may add Chapter V or Chapter VI qualifications to his General Certificate by way of indorsations.

Final certification is given by the Scottish Education Department, on a satisfactory report from H. M. inspector of Schools, after a two-year probationary period of service in approved schools, by the issue of the "Teacher's Certificate" which is a permanent certificate, not, in ordinary circumstances, withdrawn or suspended till the holder receives a gratuity or begins to receive a retiring allowance.

Fees. — Fees are charged at the various training colleges, but the local education authorities make generous grants and maintenance allowances to the students nominated by them. Thus every encouragement is given to enter the profession and no suitable person is excluded for reasons of finance.

STUDENTS IN TRAINING FOR THE GENERAL CERTIFICATE

	1923-24	1924-25
Men	405	343
Women	2000	2153
Total	2405	2496
Attending university classes	571	466
Already graduates of university	404	486

Tenure and status. — Teachers of public schools are appointed by the local education authorities and they hold

office during the pleasure of the appointing authority. They have, however, statutory protection against capricious dismissal. A teacher may be suspended from the exercise of his duties, but this does not affect his right to salary and other remuneration attaching to his office; but he may not be dismissed unless: (a) written notice of the motion for his dismissal shall, not less than three weeks before the meeting at which the resolution is adopted, have been sent to the teacher and to each member of the education authority; and (b) not less than one half of the members of the education authority are present at the meeting; and (c) the resolution is agreed to by two thirds of the members so present.

This decision of the local education authority is appealable to the Scottish Education Department and if the Department on inquiry are of the opinion that the dismissal was not reasonably justifiable, they give the education authority an opportunity to reconsider their decision. If the authority adheres to its decision, the Department may then make it a condition of dismissal that the teacher receive from the authority a sum not exceeding one year's salary.

Salaries and pensions. — These continue to be governed by the conditions as to Minimum National Scales of Salaries laid down by the Scottish Education Department in terms of Section 6 of the 1918 Act. A tendency has been noted among education authorities to regard these minimum scales as almost maximum scales, though most of them have been paying something in excess of the minimum. Financial stringency of the last three years has, however, imposed retrenchment. "Cuts" on salary within legal limits are more or less general. The higher cost of living in the larger burghs has been fairly well recognized and finds reflection in the scales adopted.

In considering the value of these scales it has to be borne in mind that they are linked up with a superannuation

scheme which has now become definitely contributory. Each teacher makes a contribution of 5 per cent of salary received towards the cost of superannuation. This levy, while immediately felt, is in the nature of deferred pay, being in the last resort repayable, and, in an amended scheme shortly coming into operation, thus much more flexible. The main benefits provided are an annuity of approximately 50 per cent of the terminal salary with a lump sum of one to one and a half times that salary, according to service. In cases of death a gratuity becomes payable. To provide these benefits, there is a corresponding levy of two per cent (merging next year into five per cent) upon all education authorities.

It may be of interest to quote the main features of the Minimum National Scales.

	MEN	WOMEN
I. Basic scales for all recognized teachers . . .	£150-£250	£130-£200
II. Modified basic scales		
(1) Teachers — 3 years trained	160- 280	140- 210
(2) Teachers — 4 years trained	180- 300	160- 230
(3) Teachers — graduates	200- 360	180- 300
(4) Teachers certificated for special subjects	250- 400	200- 350
III. Special responsibility payments		
Head teachers: primary schools	10- 300	10- 300
	(according to size of school)	
Second masters	(not laid down)	£18-£102 (according to the school)
Senior women		
Infant mistresses		
Head teachers: Intermediate and sec- ondary schools	(not laid down)	
Principal teachers of higher subjects		

N.B. Each education authority has a scale of salaries approved by the Scottish Education Department and incorporating not less remuneration than the above. The section of the Act of 1918 (6) provides that such minimum scales shall be independent of payments out of funds provided to secure special emoluments to teachers of any special locality.

MEDICAL AND SOCIAL WORK

Food and clothing. — Education authorities have power to provide food and clothing for children who, for lack of these, are unable to take full advantage of the education provided for them, provided the parents through poverty or ill-health are unable to supply these necessities themselves. If the parents can do so, but are neglecting their children, they are prosecuted at the instance of the public prosecutor on the information of the education authority. Any sums thus spent by the authority on the children of such parents are recoverable as an alimentary debt.

Medical inspection and treatment. — Although locally the work of medical inspection and treatment of school children comes within the purview of the education authority, nationally the supervision of this department of school work is in the hands of the board of health, which is responsible for public health generally. Wherever it can be arranged in the various education areas, there is close coöperation between the school and public health medical officers, and in numerous instances the same official acts in both capacities, *i.e.*, as medical officer of health for the district and school medical officer. Medical inspection is obligatory and the scheme of inspection suggested officially as sufficient is as follows:

The board of health do not desire that there should be an undue multiplication of age-group inspections, but they think that during the full period of school life, namely 5 to 18, which is the possible future range, at least four age-groups should be systematically inspected. They suggest that for the primary school the three age-groups should be (1) "entrants," *i.e.*, pupils in their sixth year and also all fresh entrants, of any age, not previously examined; (2) pupils in their tenth year (age 9); and (3) pupils in their thirteenth year (age 12). In addition due provision

should be made for the medical inspection and supervision of pupils in the intermediate and secondary schools. A systematic medical examination should be carried out in the case of all pupils after they reach the age of 16 years, and the medical supervision should be as effective as it is in the primary schools.

So far this scheme is an ideal which is very rarely if ever attained unaided by education authorities. Perhaps the most complete organization for this work is to be found in the town of Dunfermline, where, by arrangement with the education authority for the County of Fife, the school medical work is placed in the hands of the Carnegie Dunfermline Trustees, whose work in this connection has been of the most thorough order. It is not unknown in the United States, where the Dunfermline Nutrition Scale has been widely adopted.

The following comparative figures show the extent to which the work of medical inspection is overtaken :

	1922-23	1923-24
Average enrollment	866,894	758,024
Number of children seen at systematic medical inspection	208,706	215,288
Number of children specially examined	216,236	213,767
Percentage of children found to be suffering from defect	48.3	46.0
Nutrition below average	7.8	7.3
Nutrition very poor	3 per 1,000	2 per 1,000
Marked T. and A. enlargement	4.7	4.4
Seriously defective vision	4.4	5.0
Requiring spectacles	6.0	6.0

Medical treatment is permissible to education authorities in the case of the children of necessitous parents. This has been possible since 1913, and the development of this side of medical work in recent years has been considerable. Edu-

cation authorities are establishing their own clinics — general; ear, nose, and throat; eye and dental — where their inspecting officers take charge of the treatment also. “Following up” is in the hands of the nursing staff, who also lose no opportunity for education in personal hygiene in their home visits. This work is extending annually and the following from a Report by the Medical Officer of the Glasgow Authority is illuminating:

The increase in the amount of work year by year, which is even more striking than any extension of the nature of the work, is attributable not to any corresponding increase in disease but to other factors. The great public institutions, overpressed as they are by patients, tend more and more to refer to the school clinics all cases which can be adequately treated there; and parents and children have become more ready to accept the advice and treatment offered thereat. The effect of this last factor is shown, for instance, in the constantly increasing number of cases of burns, scalds, ulcers, wounds, and other injuries brought to the clinics, sometimes for first aid only.

Physical and mental defectives. — Closely allied with this side of the education authorities' work is the provision which is made for the education of those who suffer from some physical or mental defect. The mere mention that special classes and in some districts special schools are provided for these unfortunates must suffice. Authorities have power to incur expense in conveying such children to and from school.

On July 31, 1924, there were 7 residential schools, 27 special day schools, and special classes attached to 57 ordinary schools, providing for the education of physically or mentally defective or epileptic children; and the total number of children under instruction was 8147, of whom 4869 were physically defective and 3278 were mentally defective.

Between 1913 and 1924 the number of special classes and schools for all types of defective children increased from 43

to 91, and the number of children under instruction from 3319 to 8147. Within the last five years the number of mentally defective children in such schools and classes has grown from 2300 to nearly 3300, and the rate growth is increasing. It is the considered policy of the Scottish Education Department to stimulate authorities to make special provision for defectives. In the case of blind and deaf-mute children, it is the duty of the education authorities to make provision for both education and industrial and technical training and also where necessary for maintenance between the ages of 5 and 18. During the year ended July 31, 1924, there were under the Department's inspection three residential schools for the education of blind children, five for deaf-mute, and one for both combined; one special day school for blind, and four for deaf-mute children; and, in ordinary day schools, three special classes for blind and three for deaf-mute children. The total number of children under instruction was 998 (292 blind and 706 deaf-mute), as compared with 1035 in the preceding year.

Juvenile delinquents. — Mention must be made of this group, although the problem is more a social than an educational one. Speaking broadly, reformatory schools are established for youthful delinquents between the ages of 12 and 16 years, while industrial schools are for younger delinquent children and also for children whose home circumstances are such as to justify their being removed therefrom. Industrial schools may be residential or nonresidential. In nonresidential, otherwise day-industrial, schools, industrial training, education, and one or more meals a day, but not lodging, are provided. It is within the discretion of a magistrate to send children to a residential or nonresidential industrial school.

The number of children and young persons taught in reformatory and industrial schools continues to decrease. On

December 31, 1920, the number of scholars (exclusive of voluntary cases) was 5038. By the end of 1923 it had been reduced to 3143, and on December 31, 1924, the number was 2832. The number of schools has been reduced in the same period from 47 (38 residential and 9 day schools) to 35 (27 residential and 8 day schools). During the year 1924 three schools, Aberdeen Female School of Industry, Ayr County Industrial School for Girls, and Leith Industrial School for Boys, were closed, committals to these schools having almost entirely ceased. The certified accommodation of the residential schools remaining is 4056, and the number of scholars maintained in them is only 2306.

Other activities. — The mere mention of these must suffice. Physical education bulks more largely in the curriculum since the War than it did before, and it is becoming more closely associated with the school medical work. The importance attached to this branch of education by the authorities is evidenced by the fact that the National Committee for the Training of Teachers have under their management a College of Physical Education where teachers of this subject are trained. Provision is made for two-year diploma courses for suitable men and women and also for a one-year course for selected teachers already in possession of their general certificate.

One can do no more than refer to the work of the authorities on the recreation side and provision of playing fields. An interesting innovation by the Glasgow authority last summer was the carrying through of a scheme of holiday camps for the children of the poorest classes. This was financed by voluntary contributions from the schools themselves and resulted in over 5000 children who would otherwise have spent their vacation in the city streets and alleys tasting the delight of a country or seaside holiday. The scheme is being continued on a more extensive scale.

The schools are being closely linked up with the public libraries. A close connection has long existed in the cities. In the country districts the rural library schemes indicated by the Carnegie United Kingdom Trust — operating as they do through the schools — have made the library a direct educational agency. These schemes are now being taken over by the education authorities and financed from public funds.

Wireless broadcasting is also being used for educational purposes. During the last hour of the school day, lectures on subjects such as lend themselves to this form of treatment are sent out by the British Broadcasting Company, and use is made of these by those schools which have installed receiving sets. The subjects commonly treated are modern languages, history, geography, natural history, and music. The value of this instruction is, as can be appreciated, a matter upon which opinions differ very widely.

CURRENT PROBLEMS

Most of the problems which face the educational world at this moment in Scotland — and in England too — have their root in the post-War financial situation. The legislation of 1918 provided for the raising of the upper limit of compulsory school attendance to 15 years and also for the establishment of compulsory continuation classes. However desirable these developments may be in themselves, they are matters which have not and cannot receive consideration purely on their merits. To be carried into effect, they require provision of both accommodation and staff and these things mean money, which the country cannot afford at the moment.

Another problem lies in the size of the classes in elementary schools, and here the Scottish Education Department have begun to take action by intimating that by 1928 they will

insist that there be no more than 50 in habitual attendance in any class. Time is thus given to education authorities to make the requisite provision in anticipation of that event.

The most acute educational discussion of the year took place with reference to Circular 1371, which is fully dealt with in the article on England. The discussions in England had their echo in Scotland, as any diminution in the funds for education in England is reflected in the amount available for Scotland. The proposed change in the system of grants does not by itself raise a question in Scotland, where, as has been already shown, the grant is in reality a block grant. But the reason alleged for the change in England does affect Scotland, being, as it is, in need of increased economy; and although there appears to be no cause for fear for the year 1926, it is very doubtful whether the immediately succeeding years will see grants continued on the present scale.

Reference may also be made, and only in a word, to the question of adult education. This matter does not bulk so large in Scotland as it does in England. Here the magnificent provision of continuation classes by the local education authorities appears to render less clamant the intervention of a separate body undertaking to provide adult education. The question was complicated during 1925 by an agreement between the Workers Education Association and the Congress of Trade Unions, which of necessity gives the whole movement of adult education through the W.E.A. a propagandist color. The education therein contemplated is to fit the individual not so much to be a more richly equipped man and a better citizen but to be a more useful Trades Unionist. That this does not meet with the approval of all members of the W.E.A. is seen in the fact that, as a result, the Edinburgh Branch of the W.E.A., dissatisfied with the bias thus given to the movement, has seceded from the main body.

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UNITED STATES

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EDUCATION AND THE NATIONAL GOVERNMENT

While education in the United States is regarded primarily as a function of the separate states and local communities rather than of the Nation, the record of the year 1925 shows continuing activity on the part of the Federal Government in certain aspects of education. This activity is carried on mainly through the United States Bureau of Education, which still remains one of the bureaus of the Department of the Interior, notwithstanding a concerted effort on the part of educational leaders, particularly during the past year, to secure the establishment of a separate department under a Secretary with cabinet rank ; through the Federal Board for Vocational Education, created in 1917 to administer Federal aid for vocational training of secondary grade ; and through a number of other governmental agencies, notably the Department of Agriculture, with its important agricultural extension, the Children's Bureau of the Department of Labor, and the United States Public Health Service under the Treasury Department.

Federal appropriations for more or less direct educational purposes in 1925 amounted to between eighty and ninety millions of dollars, exclusive of military training. Two fifths of this total, however, was for the rehabilitation and reëducation of World-War veterans — an account now practically closed. The largest amounts appropriated for permanent

¹ This article continues the account of the educational situation in the United States given in the *Educational Yearbook*, 1924, pp. 431 ff.

educational enterprises were for the maintenance of the public schools of the city of Washington (\$11,977,000), for vocational secondary education (\$7,622,221), for agricultural education extension (\$7,442,275), and for Indian schools (\$5,716,185). Lest these figures give an exaggerated impression of the importance of Federal activity in the American educational provision, it should be said that Federal educational expenditures constitute hardly more than two per cent of the total annual expenditure for education in the country and even less than that fractional part of the total expenditures of the Federal Government for all purposes. The Bureau of Education itself received a direct appropriation of \$217,233 as compared with from five to fifteen times that amount for other technical bureaus. It continues to exert an influence, however, quite beyond its apparent financial support; through central collection of statistics, wide distribution of bulletins, circulars, and other materials, and educational surveys of state and local school systems, it maintains a type of educational leadership that is none the less effective because it is wholly voluntary so far as direct control of education in the states is concerned.

Little of importance in national educational legislation is to be recorded for the year. Advocates of the Federal Education Bill, which has been pending in Congress for the past eight years, have concentrated their efforts on the portion of the proposal providing for the Department of Education, abandoning, for the present at least, the financial-aid portion of the bill. This new measure, known as the Curtis-Reed Bill, was introduced in both houses of Congress in December, 1925, and hearings were scheduled for February, 1926. Mention was made in the *Educational Yearbook, 1924*, of the passage by Congress and submission to the states of the so-called Federal Child Labor Amendment, which, while in no sense an educational measure, would, by giving Congress

the power to enact Federal legislation protecting children up to age of eighteen, have a direct effect upon the upper stages of educational provision. The Amendment was acted upon favorably by a number of state legislatures and rejected in others; it is still far short of the three-fourths majority requisite for adoption.

STATE SCHOOL ADMINISTRATION

According to the latest information published by the Bureau of Education ¹ there are 29,345,911 children of school age (5 to 17 years inclusive) in the United States, and 24,288,808 enrolled in school, with an average daily attendance of 19,132,191. This army of school children, a little less than one fourth of the total population, is distributed most unevenly throughout the forty-eight separate states and several territories that make up the Federal Union, the states varying in size of school enrollment all the way from about fifteen thousand in Nevada to two million in New York. Eight states have a school population of a hundred thousand or less, and five states a million or more. Each state is a law unto itself in school affairs, even the statistics of education which it furnishes to the Federal Government being almost entirely on a voluntary basis. As pointed out in last year's survey,² the states vary widely in scope and quality of educational provision. Furthermore, even within each state, so strong is the tradition of local rather than state control, it is possible to find extremes of good and bad, conventional and progressive, in close proximity to each other. Strictly speaking, therefore, one can hardly draw an accurate picture of education in the United States without at least a separate report from each state school authority and certain local authorities. Actually, however, considerable information for the various

¹ *Bulletin*, 1925, No. 42.

² *Educational Yearbook*, 1924, pp. 444, 449-50.

states, both separately and as a whole, is available in the reports of the United States Bureau of Education, in the publications of the National Education Association, and numerous other state, regional, and special associations, and in the studies of a number of private educational foundations of the research type that have gradually come to play a most important part in education in the United States.

Professional improvement of teachers stands out as the most conspicuous item of progress in 1925 as reported by state representatives in the "annual roll-call" of the *Journal of the National Education Association*. Other matters emphasized in these reports are improvement of the curriculum, lengthened school term, more expert supervision, better financial support, new buildings, and rural education.

"Not every locality can report progress," the *Journal* admits. "Not every State can report an achievement that everyone recognizes as outstanding. But for the Nation as a whole there is decided advance." Professional improvement of teachers, as indicated by the requirement of higher grades of certificates for teaching, extension courses for teachers in service, and attendance at summer schools, will be discussed later in this survey. Efforts to reorganize the elementary school curriculum in order "to effect the saving of time and the elimination of irrelevant subject matter" are reported in California, Connecticut, New Jersey, and from many local communities, reflecting in part the activity of the committee on curriculum of the Department of Superintendence, National Education Association. Delaware, one of the smaller states, where school provision had been below normal until very recently, reports an increase of average number of days attended by all pupils of the state from 147.3 days in 1924 to 155.9 days in 1925, and South Carolina reports a gain of 23 days. Measures toward equalization of educational opportunity by forms of financial aid, particularly in rural

communities, are reported from Florida, Montana, Nebraska, New York, and Tennessee. Educational surveys of the entire state school system as a preliminary to further changes have been recently made or authorized in Florida, Mississippi, Texas, and Utah, and in the Philippines and Porto Rico.

So typical a part of American educational procedure has the educational survey become that two of the more important of the surveys — Texas and the Philippines — have been selected for a more detailed treatment at this point.

The Texas educational survey. — Texas is one of the largest of the American states in geographical extent, in population, in resources. Located next to Mexico, it partakes of the nature of the South and the West without having many of the special characteristics of either region. Educationally it has most of the problems of other states and certain special problems as well. For a number of years there had been public recognition of the inadequacy of certain features of the program of public education. Sentiment for improvement finally resulted in 1923 in the passage of legislation for a comprehensive state education survey and the selection of a survey commission. The survey commission engaged Dr. George A. Works, professor of rural education at Cornell University, Ithaca, N. Y., to serve as technical director of the survey, and the director in turn selected a staff of experts for the different fields to be covered by the study. The director and his staff spent a large part of the year of 1924 in field study of the situation, and the report was published in 1925. The published report comprises eight substantial volumes dealing with organization and administration of the schools; financial support; secondary education; educational achievement; courses of study and instruction; higher education; vocational education; and a general summary of the findings.

In its recommendations the Survey Commission calls particular attention to the pronounced differences between the educational opportunities of children in the rural schools and those of children in the city schools. It quotes with approval certain recommendations of the survey staff:

1. That the basis of apportioning state and county funds within the county be changed, to the end that local effort, at least as far as expressed by the number of teachers employed, the length of term, and the attendance of pupils, may be recognized and rewarded.

2. That the county board of education be given the same measure of control over the smaller independent districts as over the common school districts, to the end that coördination may be effected and high-school education may be made generally available for country children.

3. That the county superintendency be made an appointive office, selection to be made by the county board of education, which board shall also be made responsible for and authorized to provide an adequate system of rural school supervision and the enforcement of the compulsory attendance law.

4. That the county board be given the power to enforce its classification of schools by withholding from districts refusing to accept its classification a part of the funds that would otherwise be apportioned to them.

5. That the selection of teachers in the districts under the jurisdiction of the county board be by the local district trustees, but upon the nomination of the county superintendent.

6. That power to consolidate schools be restored to the county board of education, subject to appeal to the State Board of Education by dissatisfied school districts.

7. The encouragement of transportation of children residing at such a distance from school as to be exempt from the compulsory attendance law, by allowing an additional teacher-quota to districts providing it.

Although conditions vary widely in the different states, most of these recommendations would apply quite as well to

other states as to Texas. State and local financial aid ; unification of the school provision to eliminate inequalities between city and country ; professional leadership for country schools as well as for city schools ; consolidation of schools and transportation of pupils — these are problems that face state educational administrators everywhere in the United States to-day.

The Philippine survey. — When the United States, after the Spanish-American War, acquired possession of the Philippine Islands, one of the first acts of the occupation was to set up a public school system on a plan similar to systems in the United States. Early in 1925 an American commission, headed by Professor Paul Monroe, of Teachers College, Columbia University, attempted an evaluation of the quarter of a century of educational effort in the islands. The report of this commission, based on four months of field work, as well as on other studies, became available late in 1925. The report, as the authors point out in the foreword, constitutes “ a frank discussion of Philippine education.” It records the achievement of a quarter of a century of American schools, culminating in a system which enrolls 899,759 children in the primary school, 178,420 in the intermediate school, 51,210 in the secondary school, and 3535 in the University of the Philippines ; a teaching staff of 27,305 teachers ; and an annual expenditure of 23,000,000 pesos, or two ninths of the total outlay for all governmental enterprises. Since 1919 the number of pupils enrolled has increased from less than seven hundred thousand to more than eleven hundred thousand, but there has been an extraordinary rate of failure that indicates “ serious maladjustment within the system and constitutes a grievous waste of public funds and of the energies of children.”

The school system has developed without adequate provision for the professional training of teachers, and 95 per cent

of the teachers in primary and intermediate schools have undertaken their work without previous professional preparation. The report shows that 82 per cent of the pupils do not go beyond the fourth grade. "Quantity has been placed before quality as the ideal." Accepting the ultimate goal of universal education, the survey nevertheless records its judgment that it is possible to try to get it too quickly and thereby sacrifice quality of schooling. The report recommends that secondary education of the academic type be considerably restricted in favor of more practical types of education; that the trade and agricultural schools be improved; that there be proper training of teachers before new schools be opened.

Thus the Philippine report, though it concerns a special situation some thousands of miles away from continental United States, reveals some of the characteristic problems of American education. Just how fast and how far democratic education can go; what is involved in a real program of teacher-training; the proper emphasis for industrial education; and the fundamental task of adapting education to individual and community needs — these are all problems which, though treated in the report with special reference to the Philippines, are nevertheless precisely those that are giving educational leaders most concern everywhere in the United States.

Both the Texas and the Philippine reports illustrate admirably what has come to be a customary educational procedure in the United States — the method of the survey, an objective study, usually by an outside agency, conducted with the use of modern tools of social research — tests and scales, statistical measures, comparative study of quality and extent of educational provision. Few states or even local communities in the United States to-day would think of making any important changes in educational policy without

some such intensive survey of existing facilities as has been described.

Educational finance. — Reference was made in the *Educational Yearbook, 1924*, to the Educational Finance Inquiry and its careful study of school financing in various typical states. Two outstanding events of the year that indicate continuance of significant work in this field are the appointment, by Governor Smith of New York, of a State Commission on the Financing of Education, and the creation, through the joint action of the Secretary of Commerce, the Secretary of the Interior, and the President of the Department of Superintendence, National Education Association, of a National Commission on Economy and Efficiency in the Business Management of School Systems.

The New York Commission, appointed at the request of a conference on educational financing, has undertaken "to study the best methods of financing education in the cities and in the rural districts, and the sources of revenue therefor, to meet the expanding needs and to secure the most effective educational administration." The National Commission on Business Efficiency has for its task "elimination of the wastes and increase in efficiency in the expenditure of the Nation's \$2,000,000,000 annual bill for public school education." Pointing out that the annual cost of public education has nearly doubled in the past five years and is almost four times as great as it was in 1915, and that while much, but not all, of this additional expenditure is due to decreased purchasing power of money and to increased school attendance, the Commission hopes to suggest "economies that might be effected without any depreciation of the quality of the education given."

There have been several attempts during the year to restate the economic justification for schooling, notably in bulletins of the National Education Association and the

United States Bureau of Education. In the Bureau's *Education Pays the State* the states are ranked according to educational expenditures and the conclusion drawn that, "Notwithstanding the obvious difficulties of proving such matters statistically, it seems clear that properly applied expenditure for education is profitable to the state, because it tends to increase income and wealth, aids in the decrease of illiteracy, and gives to the individual better opportunities for self-development and achievement, as well as a higher standard of living."

PRESCHOOL AND KINDERGARTEN EDUCATION

There is no uniform practice in the United States with regard to the age when compulsory school attendance shall begin or when it shall end. Of the 48 states, 28 fix the age of 7 as the beginning age, and 20 make it 8, but custom in most of the states has placed the school attendance age at six years of age for entrance to the first grade and a year earlier where there is a kindergarten. More recent efforts in preschool education in the United States, therefore, are at present concerning themselves with children under five. The most important recent development in this field is the nursery school. The Bureau of Education estimates that there are now some twenty-five *bona fide* nursery schools of the newer type, located in sixteen different cities. A writer in *Childhood Education*, a new educational periodical dealing especially with the newer methods for young children, notes that in the past three years at least six specially trained English nursery-school teachers have come to the United States to help organize schools for children of nursery-school age.

Kindergarten provision is customary in most of the larger cities in connection with the public school, but is still almost entirely lacking in the rural districts. There were 617,373 children in kindergartens in 1924, the last year for which

statistics are available, and all but 54,456 were in public schools. The total, however, is hardly a fourth of the children five years of age. There are real gains, nevertheless, according to Miss Nina C. Vandewalker, who reports to the United States Bureau of Education that the number of school systems having kindergartens increased from 1203 to 1477 between 1922 and 1924, and the actual number of kindergartens from 8889 to 9813. The Southern states, where kindergarten progress has hitherto been exceedingly slow, have recently begun to provide kindergarten education at public expense.

Changes that are regarded by kindergarten leaders as even more important than numerical increases are the better adjustment of the kindergarten to the "grades"; appointment of additional "kindergarten-primary supervisors" in many cities; better training of kindergarten teachers; and the gradual working out of a kindergarten-primary curriculum based on recent advances in psychology.

ELEMENTARY EDUCATION

It is difficult to separate "elementary" pupils from "intermediate" and "secondary" in the United States in any such way as to be intelligible to those who do not know the American school situation. Of the approximately twenty-four million children attending school, something over twenty millions, according to Bureau of Education statistics, are attending elementary schools in the sense that they are attending the first eight "grades" — that is, the six years of what is now more usually regarded as the elementary school, or the seventh and eighth grades of what is now coming to be known as the "junior high school." Of the total population, 21.70 per cent are enrolled in school, as compared with 19.39 a decade ago. Since the percentage of population has slightly decreased, this undoubtedly means wider acceptance

of compulsory attendance laws as well as greatly increased high-school enrollments.

The most serious problem in elementary school provision remains that of the rural districts. "Rural education is still the weak spot in the American educational system," writes Mrs. Katherine M. Cook, the Government's chief specialist in rural education, though she supplements this statement by showing that there has been recently a "complete emergence of rural education from the realm of sentimental oratory and general promotion to that of statesmanship and professional achievement."

Some of the more important facts about the rural school problem have been assembled this past year in the report of a Committee of the Rural Department of the National Education Association. This Committee, originally appointed in 1922, published in 1925 the results of a careful study of rural school attendance. It appears from this that the median number of days of actual attendance of country children is 141.7 days, or, in other words, that "half of the children in rural communities attended schools less than seven and a half months; over a fourth of the children considerably less than five months, and thirteen per cent less than three months." That attendance in rural communities is definitely affected by child labor is made clear in the report. Of 535 children in a truck-farming community in Maryland between the ages of 6 and 16 years, approximately 11 per cent, in spite of an attendance law, were not enrolled in any school, and in six Michigan counties where beets are raised in great quantities 52.9 per cent of the children missed some school for farm work.

From the organization point of view consolidation of smaller schools into a larger central school has remained the most usual method of improvement of rural education. Estimates made by the Bureau of Education during the year

on data received from a majority of the states indicate a doubling of the number of consolidated schools since 1917 — 7500 then and 15,000 now. A 1925 bulletin of the Bureau points out that in recent reports practically all the state departments of public instruction urge consolidation as the first main step in extending school facilities to neglected country districts. Consolidation of schools involves, of course, the problem of transportation; the Bureau of Education states that public school authorities are annually transporting a million pupils at a per capita cost of \$32.55.

It is not claimed, however, that consolidation of schools will fully solve the problem of rural education in the United States. Better roads and highly developed automobile transportation render the one-room school accessible as well as the consolidated school; there are many regions where transportation to such a school can be more easily arranged than transportation to a larger central school; and there are still many who feel that, especially for younger children, the one-room rural has distinct educational advantages over the large school, especially if the larger school is to be merely an imitation of the conventional type of urban school. The demonstration one-teacher school, maintained with the help of Teachers College, Columbia University, for the past three years in a northern New Jersey county was discontinued as a one-teacher school in 1925, the attendance having grown beyond the possibility of handling by a single teacher, but this and other experiments have shown clearly some of the opportunities that are possible without resort to consolidation. Small one-teacher schools will continue to exist for many years, so far as can now be foreseen. Thus, although the Bureau of Education finds 20,000 small schools abandoned or made over in the five-year period between 1917 and 1922, and a corresponding movement for consolidation more or less since that time, it is reliably stated that six of the

states, including New York, Pennsylvania, and Illinois, still have over 7500 one-room rural schools apiece. The best figures that can be obtained indicate between two and a half and two and three-quarter million rural children in consolidated schools, two and a quarter millions in small village schools, and from four and a half to four and three-quarter million children in one-teacher schools.

The elementary school curriculum. — More attention is being given at the present time to the curriculum than to almost any other aspect of elementary education. To cite but one example, three hundred public school systems in all parts of the country were at work during the year 1925 on the coöperative plan for curriculum revision sponsored by the National Education Association. The immediate objectives of this plan, as stated by the officers of the Department of Superintendence of the Association, through which the work is cleared, are: (1) to enroll a large number of systems effectively working together in curriculum revision; (2) to furnish suggestive material for continuous constructive work on the curriculum — that is, for a growing curriculum, rather than to draft and recommend a uniform course of study. The ultimate objectives are to give every system the best organization possible for curriculum-revising and the “carrying on of scientific research where the results are not wholly immediate but will in time contribute to a better curriculum.” Among the school systems engaged in this coöperative study are 17 cities of over 100,000 population, 40 between 30,000 and 100,000, 58 between 10,000 and 30,000, 38 between 5000 and 10,000, and 39 between 2500 and 5000, besides a dozen or more higher educational institutions, at least one county-school system, and the state departments of nine states. Publications so far resulting from this study include yearbooks for the past three years and a summary of the curriculum situation by the Research Division of the

National Education Association. This summary shows, among other things, the unusual recent activity in curriculum revision as indicated by the number of new courses of study for elementary schools, an admittedly incomplete list containing 869 such courses of study published since January, 1923, with more than a hundred dating from the early part of 1925.

It is evident from an examination of these newer elementary courses of study that much of the change consists merely of minor revisions of traditional material. There are signs, however, as the studies proceed, of much more fundamental changes based upon the determination of real aims in education. "When life is being remade within a generation, when this brings fundamental modifications within the space of a decade," says the summary just referred to, "a static curriculum is an anomaly." It adds:

This means a new curriculum. Its content must be the result of extremely careful selection. There is no room for material that does not contribute positively and liberally to the equipment for successful living with one's fellow beings. What dead wood should be pruned out? What new topics have a right to come in? How can training for citizenship and morality be most effectively given? These are the questions hundreds of course-of-study committees are facing. They must be answered correctly or the nation will be vastly poorer a generation hence.

Recent studies of time allotments in elementary schools show definite changes even in the conventional offerings as compared with twenty years ago. Reading, arithmetic, and language have retained their ranking positions for the most part, but health and physical education now follow close upon the old tool subjects, and there is a growing prominence of art, music, and other creative activities that suggest something of a newer conception of the elementary school, which

concerns itself quite as much with emotional behavior, attitudes, and interests and community living as with the subjects and skills of the traditional school.

INTERMEDIATE EDUCATION (JUNIOR HIGH SCHOOL)

By 1910 the accepted school organization in the United States had come to mean an elementary school of eight years or "grades" followed by a secondary school of four years. In some parts of the country (chiefly the South) the elementary school covered only seven years, and in parts of New England nine (not including a year of kindergarten preceding the regular elementary work in urban communities), but in general it was customary to think of the American school as on an "8-4" plan. Attacks upon this type of organization from every direction have gradually led to the adoption of a policy, now rapidly being put into effect, of a six-year elementary school followed by six years of secondary education — three years of "junior high school" and three years of "senior high school." Recent studies, particularly during 1925, have emphasized the fact that there is nothing sacred about this so-called "6-3-3" plan, any more than there was about the "8-4" plan; indeed, there are those who seriously question whether there is any real line that can be drawn at all between elementary and secondary education. Nevertheless, in present practice a new type of intermediate or middle school seems to be emerging — a school covering a period of some two, three, or four years (usually three) in which a basic cultural, civic, and prevocational training is to be given to all children through at least a large portion of adolescence.

The latest official figures show that of 14,827 high schools reporting in detail for 1924, the last year for which statistics have been gathered, 704 are reported as junior high schools and 1316 as junior-senior high schools, or over 2000 schools

where the junior-high-school conception is definitely recognized. All the secondary education studies made during the year emphasize the junior high school. Thus each of the "national subject committees" set up in connection with the Department of Superintendence study of curriculum is expected to consider the junior high school as one of the phases of the particular subject; students of rural education have recently been studying the junior high school with special reference to the rural situation, and several of the most important educational books of the year deal with the curriculum of the junior high school. One typical junior-high-school program that has been given wide currency through publication during 1925 in one of the standard books attempts to provide courses during a period of "adjustment" (first half year); "exploration and preview" (one year); "provisional choice" (one half year); and "persistence" (one year). This program, which covers the seventh, eighth, and ninth years of schooling, includes the following subjects: English (4 or 5 hours a week throughout three years); general mathematics, required of all students three half years and elective thereafter; social studies; science, health, some form of industrial art, agriculture or home economics, music, art — all required for the three years, with geography required for three terms and the following electives available the second half of the eighth year and later: mathematics, foreign language, commercial geography, junior business training, industrial arts, agriculture, and home economics. Vocational work on a half-time basis is available as an elective in the ninth year. While much of this material, especially if handled in the traditional way, would fit in with the "college preparation" that still exerts an influence in the high schools, there is an increasing tendency to free the junior high school from the college entrance incubus, and during the past year resolutions have been

passed by several important educational organizations asking that college-admission subjects be determined on the basis of three years of senior high school alone.

SECONDARY EDUCATION

The various state departments of education report a total of 3,176,074 boys and girls in public high schools in the United States. The Bureau of Education has on record the names of 19,442 public high schools, though actual reports were received from somewhat less than fifteen thousand schools, enrolling 2,538,381 students. These schools are supposed to include students in the upper four years only, but the discrepancy between Federal and state figures suggests that junior-high-school pupils may possibly be included in the state reports. Private secondary schools to the number of 2124 are reported, with a total enrollment of 216,522. These figures, published in 1925, make clear that estimates of a secondary school attendance of three millions or thereabouts, as suggested in the *Educational Yearbook, 1924*, are at least conservative — the actual enrollment for 1925 in both public and private secondary schools is probably not far from three and a half million. These figures also show how overwhelmingly public the provision for secondary education now is in the United States. The established policy for the past quarter of a century at least has been to try to put high-school facilities free of cost within reach of every boy and girl who wished to attend — often, indeed, at the sacrifice of satisfactory development of elementary school facilities. At the present time this policy has been extended to mean the provision of schooling on a compulsory basis up to sixteen or eighteen years of age in many of the states.

The average size of American high schools (199 students) gives no real idea of what these institutions are like. There

are 614 high schools with a thousand students and over, including 13 with more than 5000 each, and one high school reports 8410. At the other extreme are 5110 schools with 50 students or less, so that the vast majority of these schools are small. The remaining figures are: Schools of 101-200 students, 2618; 201-500, 1728 schools; 501-1000, 717 schools.

While secondary education in the United States is predominantly public, the private secondary school has maintained itself in certain sections and with certain parts of the population and religious denominations. Some private schools are maintaining themselves as experimental or at least as advanced schools. Increased enrollments in private schools are reported in 18 states, chiefly in the East. Of important religious denominations maintaining secondary schools, all but two have fewer schools than they had ten years ago, and 6 of the 11 have fewer students. The one conspicuous gain in both schools and enrollment in the private secondary field is in the Roman Catholic denomination, which, with but 280 schools and 12,777 students in 1895, when other denominations were at their peak, now has more than a thousand schools and over a hundred thousand students — practically half the private secondary school enrollment. The other notable recent development in private secondary education is the tendency to create secondary schools of a distinctly newer type or to transform old established schools into experimental or demonstration schools. An outstanding illustration of this during the past year was the reestablishment on the four and a half million dollar Ellsworth Foundation of the century-old Western Reserve Academy, at Hudson, Ohio, which now seeks to make of itself a demonstration or laboratory school for secondary education. The average private secondary school has about 100 pupils.

As a result of the extension of opportunities to all elements of the population, the central problem in secondary education is at once different from that in all other countries and becomes that of providing for differing abilities, interests, and needs. It was out of this consideration that the junior high school really came. For the senior-secondary-school period as well as the junior, reëxamination and ultimate remaking of the content of secondary education in terms of present-day objectives have become necessary. Significant of the effort to study secondary school problems is the establishment in 1925 of the National Committee on Research in Secondary Education. This committee has already listed 366 research studies of more than local importance now under way in schools of education, research bureaus, and foundations, and has prepared a bibliography of researches in secondary education for the period 1920-25 which includes approximately 900 completed and available reports in this field. The committee has also undertaken studies of senior-high-school promotion plans, rural junior high schools, characteristics of high-school pupils, high-school supervision, high-school teaching load, and pupil-ability *index*.

That research alone will not solve the high-school problem is generally admitted. One of the recognized leaders in secondary education makes the point that the primary need is for an acceptable philosophy rather than for research, on the ground that changing conditions in recent years — economic, industrial, political, and social outside the schools, and conditions of teachers and pupils within — demand a new philosophy. He says, however: Research will give the facts on which this new philosophy is built; and when it is proposed, research will furnish the facts leading to its establishment.¹

¹ T. H. BRIGGS, in *School Life*, February, 1926, pp. 116 ff.

VOCATIONAL EDUCATION

The total enrollment of pupils in vocational courses for the year 1925, as reported by the Federal Board for Vocational Education, was 659,370, as compared with 652,594 in 1924, and 164,186 in 1918, the year in which the Federal Vocational Education Act was passed. Part-time trade and industrial schools enrolled 295,735, of whom 265,335 were in general continuation schools, while evening trade schools cared for 86,740 and all-day schools had 39,666. Agricultural schools enrolled 86,355 and home economics 151,074. While the figures show steady increases in recent years, the totals are still small as compared with those already given for general secondary education. The enrollment in part-time classes has been particularly affected in those states where special part-time compulsory laws have been enacted or the general compulsory school age has been raised. Compulsory part-time-schooling laws have been passed in 25 states, requiring attendance for from four to eight hours per week. The age requirement varies; the majority place the lower age limit at 14, two states at 16, and one at 12, with an upper age limit ranging from 14 to 18. Three million children between 14 and 18 years of age are not in school, according to Bureau of Education estimates, and this particular group is regarded as the special concern of industrial education.

Federal Vocational Board statistics do not include, as a rule, schools not federally aided. Thus in home economics there were known to be over thirty thousand pupils enrolled in schools not supported from public funds. No aid whatever is given directly to commercial education by the Federal Government, but in the case of salesmanship education alone there are said to be 600 stores with retail training classes for employees. That there is to be a considerable development

in commercial education is asserted by the Federal Board for Vocational Education, which says:

The past year has shown most gratifying and substantial progress toward an adequate program in vocational commercial education. The most significant developments are the indications that school authorities are awakening to the need for a study of the effectiveness of their commercial courses. City surveys and studies of commercial occupations are being made; high-school curricula are being revised in accordance with the facts found through studies of the educational needs of commercial workers; new types of day- and evening-school courses for office and store workers are being tried; greater attention is being given to the supervision of the instruction; more teachers of commercial subjects are beginning to question the practices traditional in their work.

TEACHERS

The teaching profession in the United States now comprises more than 915,000 persons. Of these about 750,000 are public school teachers, some 15,000 occupy administrative or supervisory positions in the public system, and the remaining 150,000 are employed in various types of nonpublic colleges and schools. Of the 617,078 teachers reported by the Bureau of Education in elementary public schools, 76,816 are men and 540,262 are women. The feminine emphasis is not quite so dominant in secondary public schools, where 51,915 of the teachers are men and 92,315 are women,¹ but the overwhelming percentage of women teachers in the aggregate is indicated by the fact that while in 1870 as many as 41 per cent of all teachers were men, only 16.9 per cent were men in 1924, the last year for which statistics were gathered. On the other hand, this 1924 figure represents an improvement over 1919-20, when only 14.1 per

¹ The discrepancy in the totals is due to overlapping positions.

cent of teachers were men, and it is worth noting that the number of men students in training schools has increased somewhat more rapidly than the number of women in the past two years.

The average annual salary of teachers, supervisors, and principals in public schools was \$1227 in 1924, but the national average obscures the wide variation among the states — from \$1942 in New York and \$1820 in California to \$577 in Georgia and \$456 in Mississippi. The average salary is more than \$1500 in half a dozen states and less than \$750 in nine states, the lowest salaries invariably being reported from states having large rural populations.

That teacher preparation is beginning to catch up somewhat with the requirements, even in the rural sections, is shown by the most recent statistics. Teacher-training institutions are now turning out more than a hundred thousand prospective teachers a year, or about one for every seven teaching positions. This, the Bureau of Education estimates, is within 20 per cent of the normal requirements. It is clear, however, that a large number of untrained teachers are still in the service, and that a certain number of the unqualified are entering each year. To remedy this situation many of the states in the past few years have undertaken comprehensive programs of teacher training. In Arizona and North Dakota the year 1925 marked the end of preliminary periods leading to higher state requirements for all teachers, and it is now reported from these states that hereafter no teacher can be employed without at least some professional preparation beyond the high school. Five years ago the state of Pennsylvania, one of the largest states in the Union, with a considerable number of untrained teachers in rural schools, set up a requirement, to become effective in 1926, whereby every child in the public schools of the state would have a teacher with at least two years of training be-

yond the high school, and indications now are that this standard will be met next year according to schedule. Maine has recently adopted a training standard of the same type to be completely operative by 1930, and in Virginia the state authorities have announced that after 1926 they will discontinue issuing any teachers' certificates based upon less than one year of professional training in an accredited institution of higher learning.

Summer schools and so-called "extension" courses have been chiefly depended upon to speed up the adoption of higher professional standards, especially for teachers in service. In Missouri, for example, 16,000 of the 20,000 teachers attended summer school in 1925; in Oklahoma it was 14,000 out of 17,000. Virginia and Alabama report 60 per cent of their teachers in summer schools, and West Virginia 70 per cent, with a net gain in Alabama of 5 per cent in the total number of professionally-trained teachers. That rural schools are still the schools where improved standards of teacher preparation are slowest in coming is indicated by a recent study in Tennessee, where, of nearly 2000 new rural teachers, only 12 were college graduates and 27 normal-school graduates. A corresponding group of city school teachers would have shown practically all with at least normal training and a fair number with university and college degrees.

The movement to substitute four-year teachers' colleges for the older two-year normal schools continues to make headway. The latest official list shows a gain of 11 teachers' colleges in two years.

EDUCATIONAL TESTS AND MEASUREMENTS

Interest in educational tests and measurements has not abated in the past year, though certain changes are evident. Particularly noticeable is the strong tendency towards a re-

examination of the fundamental hypotheses of measurement, both of intelligence and achievement. A three-year study of the nature of intelligence, made by Professor E. L. Thorndike, leading American authority on measurement, and financed by the Carnegie Corporation, was brought to completion by the end of the year. Professor Thorndike himself was the recipient in 1925 of the Butler gold medal, awarded every five years for the most distinguished contribution to philosophy or to educational theory, practice, or administration, the award being granted "for his contribution to the general problem of the measurement of human faculty and to the application of such measures to education."

Two new tests published during the year were the McCall "Multi-Mental Scale" and the I. E. R. tests of selective thinking.¹ In practice the chief recent changes in measurement have to do with greater emphasis upon tests for their diagnostic value and for their direct helpfulness in assisting individual children. There has been, too, an effort to place intelligence and achievement testing in a more accurate relation to other factors in learning and in life, particularly in connection with the growing interest in the creative powers and emotional life of boys and girls. Some of the most influential books of the year have been those in which, without detracting from the scientific importance of measurement, the writers have brought out the significance of other than intellectual factors in human personality.

College and university use of tests and measurements, especially psychological tests of intelligence, has increased steadily. Of 110 colleges studied by Dr. H. A. Toops in 1925, 66 had given tests. In the State of Ohio alone, where but 5 out of 44 colleges had used tests in 1920, 26 were using

¹ Both published by Teachers College, Columbia University, New York City.

them in 1925. While such tests are usually thought of as intended chiefly for admission, the three most frequent uses found by this investigator were: (1) to determine dismissal from college for low scholarship; (2) to encourage extra effort in the case of unmotivated bright students; (3) to determine the amount of work a student should be allowed to carry. The College Entrance Examination Board, for over a quarter of a century influential in determining college-entrance requirements, especially for Eastern endowed universities, during the year decided to prepare and offer psychological tests for admission to be available to the coöperating colleges along with the regular examinations for entrance. The psychological tests for freshmen carried out under the auspices of the American Council on Education in 1924 were used again in a revised form in 1925, more than a hundred colleges coöperating in the experiment to see how useful such tests could be for admission and for other purposes.

In achievement testing Dr. Ben D. Wood, one of the leading investigators in this field, summarizing results of recent studies and raising numerous questions concerning the technique of testing, says: "All our data show the crucial need for increasing the validity and reliability of our educational measurements. Even our best tests afford only approximately accurate placement of individual students." He concludes, however, that we must not allow merely technical questions to obscure "the one outstanding result of recent research in the field of achievement tests: that 'new type' tests are much more reliable and valid than 'old type' examinations."

As to measurement effort in other fields, the tests and scales referred to in the *Educational Yearbook, 1924*, have been supplemented recently by a test of art appreciation, a scale for measuring attitudes, and a "test of fairmindedness." The scale for measuring attitudes is part of the

work of the Character Education Inquiry, which is being carried on by the Institute of Educational Research in coöperation with the Institute of Social and Religious Research, New York.

HEALTH AND SOCIAL WELFARE OF CHILDREN

A survey of recent progress in health education shows the usual uneven distribution of results — the most elaborate provision in the larger urban centers, good facilities in some smaller cities and towns, and least provision in rural regions ; this despite the fact that most studies of health conditions agree that health problems are more serious in the country than in the city.

The median urban practice in health education is best shown in a study of 86 cities between 4000 and 70,000 population, made during the year by the American Child Health Association. In 84 of these 86 cities nursing service has been established in the schools, and in 69 of them medical service is also provided. "Some form of physical examination or inspection is almost universal," the Association reports, but it points out that this examination is usually very superficial (in 35 cities less than two minutes is devoted to each child) ; that there is no uniformity or standardization in the examination procedure or in the method of securing correction of physical defects ; that the records of the findings of the examinations and the results obtained in the nursing follow-up are seriously incomplete ; and that the present practice of the inspection of school children by the teacher for the detection of early symptoms of disease is inefficient. The common drinking cup has all but disappeared from American city schools ; it was found in only 13 of the 900 schools visited. Of the 86 cities studied, 65 have begun to give the teaching of health an important place in their school curricula. The surveyors found, in conclusion, that each city was

carrying on some organized effort for bettering the health of children, though the amount of such work on the average is about one half of what might be expected in a reasonable health program. They recommended that every community provide once during the school year a thorough physical examination of every school child; that health training and instruction be developed in such a manner as to interest the children and maintain a balance between sound basic instruction and stimulation of proper habit formation; and that the hygiene of the school child be kept always in mind in the erection and maintenance of school buildings.

As to other aspects of health and physical education, the latest official reports show that 42 states now have laws requiring or permitting medical or health inspection; that about one third of all cities are now providing school lunch; that open-air and open-window classes are a part of the equipment in about one fourth of the cities above 30,000 population; and that so-called "sight-saving" or "sight-conservation" classes are among the special types of schools that are being provided rather rapidly in cities that are more than normally concerned about the education of the blind and other handicapped groups. Another recent development in special education is a study of the best methods of selecting and training hard-of-hearing children, which has recently been undertaken by the American Federation of Organizations for the Hard-of-Hearing in coöperation with the United States Bureau of Education. In still another field of health activity, examination of nearly 600,000 infants and preschool children at 26,353 child-health conferences for 1924-25 was reported to the Children's Bureau of the United States Department of Labor by states coöperating under the Federal Maternity and Infancy Act.

Thirty-three states now have laws making physical education a part of the school curriculum. According to the

latest available report of the Playground and Recreation Association of America, 711 cities now maintain playgrounds. Because of the importance of the physical- and health-education program in higher institutions, and the emphasis, sometimes regarded as excessive, upon athletic sports, the Carnegie Foundation has recently undertaken a comprehensive study, to take not less than two years, of school and college athletics.

COLLEGE AND UNIVERSITY EDUCATION

Five hundred and ninety-five colleges and universities are listed in the latest official directory of the United States Bureau of Education.¹ In addition 156 institutions are reported as junior colleges, and there are a certain number of professional and other schools not attached to universities that bring the list of higher institutions in the United States up to about eight hundred. No official statistics are available for college and university enrollments for the year under review, but figures collected by Raymond Walters for *School and Society* as of November, 1925, show an increase of 7 per cent in enrollment of full-time students for the academic year 1925-26 as compared with the preceding year. Of the 184 colleges and universities on the approved list of the Association of American Universities all but 27 report increases. "Higher education in the United States has become centralized to a marked degree in State and urban universities," Dean Walters points out. Of the more than four hundred thousand students enrolled in all American colleges, universities, and professional schools, the 25 largest universities, representing 4 per cent of the total number of institutions, have 172,687 full-time students, or approximately 40 per cent of the total for the country.

¹ Bureau of Education, *Bulletin*, 1926, No. 1, pp. 46-57.

The junior-college movement seems to be growing, especially in certain localities. Of the 156 such institutions reporting in 1925, 24 were in Texas, 17 in Missouri, 11 in California, 10 in Kansas, 10 in Kentucky, 9 in Minnesota, 7 in Illinois, and 7 in North Carolina. All of the junior colleges in California are part of the public school system, but in most of the other states they are privately endowed, usually denominational in origin and control. On the one hand there is a movement to push the public high school up into the college field; on the other there is a decided tendency on the part of higher institutions, especially the larger ones, to leave more of the work of the first two years to smaller colleges or to the secondary school. The American college has always occupied a unique position, between schools of secondary grade on the one hand and university work of graduate and professional grade on the other. At present some colleges tend to restrict their field to higher work — surrender of the first two years, as at Johns Hopkins, is the most recent and most extreme example, while others, without as yet eliminating the first two years, are attempting to stress intellectual independence and freedom from the ordinary routine, particularly for the more gifted students, by methods like those of the "honors courses," described in the *Educational Yearbook, 1924*. The honors work has continued to attract attention during the year; the General Education Board, for example, is coöperating in an experiment in honors work at Swarthmore College, having appropriated for the purpose the sum of \$240,000 to cover a period of five years.

Articulation of secondary and higher education remains one of the most difficult problems in education in the United States, particularly in view of the tremendous expansion of secondary education and the changed policies that are involved in it. The emergence of the junior high school, in

particular, has stressed the fact that "preparation for college" in the sense in which this was once meant has ceased to be a primary function of the secondary school.

STATISTICS ¹

<i>General</i>	
Total population of United States	112,078,611
Children of school age (5 to 17 years inclusive)	29,345,931
Pupils enrolled in public schools	24,288,808
Pupils enrolled in private schools	1,727,264
<i>Public Schools</i>	
Elementary (kindergarten and first eight grades):	
Boys	10,567,014
Girls	10,331,916
Total	20,898,930
Secondary ²	
Boys	1,607,418
Girls	1,782,460
Total	3,389,878
<i>Private Schools</i>	
Elementary:	
Boys	682,259
Girls	790,886
Total	1,473,145
Secondary:	
Boys	122,821
Girls	131,298
Total	254,119
<i>Teachers (public schools)</i>	
Men	128,731
Women	632,577
Total	761,308
State, county, city, and other superintendents of schools	12,256
Supervisors of instruction	7,924
Principals of elementary schools	9,461
Principals of secondary schools	17,881
Total, teachers and other school officers, duplicates excluded	774,114

¹ Based mainly on U. S. Bureau of Education, *Bulletin*, 1925, No. 42.

² For kinds of schools see text under "Secondary Education" and "Junior High School."

STATISTICS — *Continued*

<i>Educational Finance</i>	
Expenditures of public schools:	
Salaries of superintendents, supervisors, principals, and teachers	\$978,064,705
Sites, buildings, furniture, library, and apparatus	388,469,143
All other purposes	454,210,088
Total	\$1,820,743,936
Revenues of public schools:	
Permanent funds and lands	\$24,666,275
State taxes and appropriations	237,659,875
County and local taxes and appropriations	1,280,722,813
All other sources	75,388,862
Total	\$1,618,437,825
Total number of schoolhouses	263,280
Value of all school property	\$3,744,780,714

CURRENT PROBLEMS

Among the more important current problems not specifically dealt with in the preceding pages are those that have to do with the so-called "progressive education" movement, religious education and the public schools, and adult education.

"Progressive education." — It has been an unusually interesting and fortunate year for the "progressive schools" in the United States (the name corresponding roughly to what are usually known as "the new schools" in Europe). The schools that are genuinely of the newer type are still very few in number, but some of them appear to be exerting an influence much beyond their numerical importance. The Progressive Education Association, founded in 1919, had its first year of real achievement in 1925, when its new quarterly magazine, *Progressive Education*, began putting into accessible form much needed information and help on such topics as individualized instruction, the project as an educational instrument, new ways of handling social studies, the new

child study, and creative expression in art. Some of the most important books of the year dealt with progressive education, notably Hughes Mearns' *Creative Youth*, which describes a five-year experiment in creative poetry work in the Lincoln School, New York City. Important exhibits showing the possibilities of self-expression through art were shown at the Philadelphia conference of 1925 and still finer examples were brought together for display at the meeting scheduled for early in the year 1926 at Boston. There is a decided international interest running through the American progressive education movement. Besides the several hundred American delegates who went to the Edinburgh meeting of the World Federation of Education Associations in July, 1925, some forty went from the United States to the conference of the New Education Fellowship, representing the newer schools of Europe, held at Heidelberg, Germany, in August.

The principles of the American progressive education movement, as recently enunciated by the Progressive Education Association, are, briefly: (1) freedom to develop naturally; (2) interest as the motive of all work; (3) the teacher a guide, not a taskmaster; (4) scientific study of pupil development; (5) greater attention to all that affects the child's physical development; (6) coöperation between school and home to meet the needs of child life. Much of this has long been accepted in theory, but it has remained for a relatively small group of schools, both public and private, to put it actively into practice. What is particularly different in some of the leading progressive schools is the opportunity offered the children for creative self-expression in various art forms, and the emphasis upon the individual.

Closely connected with the progressive education movement, though deriving for the most part from a different source, is the recent revival of interest in the emotional as

opposed to the merely intellectual in human behavior. Numerous recent books by parents, mental hygienists, social workers, and others testify to this new approach to the problems of childhood, as do also such events as the conference on "Modern Parenthood" held at New York in October under the auspices of the Child Study Association of America and the creation of a "Committee on Behavior Problems of Children" under the joint auspices of the National Education Association and the National Conference on Social Work. Other evidences of the strength of the new interest are the nursery schools already referred to, the child guidance clinics, the visiting-teacher movement, school counseling, and the various beginnings in parenthood education. Conventional schooling of the routine type has never been so vigorously questioned, both within and without its own ranks, as during the year 1925.

Religious education. — What to do with religious education, especially in relation to the public school, is one of the current problems upon which little progress appears to have been made in the past year. The traditional separation of church and state in the United States has resulted in a situation for which there is sometimes said to be no exact counterpart anywhere else in the world — a huge program of public education from which the essential religious element is supposedly separated and left to church and Sunday school for a few minutes each week. Recent efforts in religious education have sought to change this situation, usually by some plan of midweek religious instruction carried on in more or less close connection with the public school. In New York during the past year the legality of this plan has been in question before the courts, but it has generally functioned without interference; indeed, Oregon in 1925 passed an act specifically permitting children to attend weekday religious classes during school time. There has been a considerable

growth of the so-called "daily vacation Bible school," which attempts to give Biblical instruction for a month or so during the long summer vacation, usually in conjunction with a program of games and crafts, and a decided increase in interest in the better preparation of teachers for this and other types of religious-education enterprises. An event that should be noted in this connection is the United States Supreme Court decision in the Oregon case. The Court denied the right of the state in its compulsory education law to compel attendance at public schools only. Those who brought the action to test the law were in part religious authorities who were interested in maintaining denominational schools where religion could be taught.

Adult education. — In the *Educational Yearbook, 1924*, reference was made to a proposed study of adult education to be carried on by the Carnegie Corporation of New York. One event of the year which shows something of the current interest in this field was the conference on adult education held at Cleveland, Ohio, in October, which resulted in a plan for an organization to be known as the American Association for Adult Education. Dean James E. Russell, who served as chairman of an advisory committee for the study and was also chairman of the conference, told the representatives present that "there is no phase of current educational development that is making more rapid and significant strides than adult education. It is striking deep roots into all classes of society." Figures presented to the conference by President Frederick P. Keppel, of the Carnegie Corporation, showed that at least three million persons are engaged in some form of adult education. In connection with the Carnegie study the Institute of Educational Research, under Professor Thorndike, has been making an investigation of the learning process in the adult. A survey by the United States Bureau of Education in the spring of 1925 showed that 34

states have enacted legislation favoring the establishment of elementary schools for adults in English and citizenship, and that some 336,000 persons were participating in this one form of adult education alone.

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URUGUAY

BY

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URUGUAY

INTRODUCTION

The Eastern Republic of Uruguay (República Oriental del Uruguay) is one of the smaller of the South American republics. The country is about the size of North Dakota and covers 72,150 square miles. In 1924 the population numbered 1,640,214, distributed among the nineteen departments into which the country is divided. The capital, Montevideo, had a population of 422,499 in the same year. Politically Uruguay is one of the most progressive countries in America and has during the past twenty years introduced extensive measures of social legislation which would elsewhere be regarded as radical. Education has kept step with the social progress of this period.

ADMINISTRATION OF EDUCATION

The educational system of Uruguay is governed by laws passed by the legislative authority of the country and administered by various agencies appointed for the purpose. The system is divided into three main branches: elementary, secondary, and higher, the last of which includes preparatory courses, generally two years in length, which are required for admission to the professional courses. In addition to these main branches provision is also made for education in commerce, industry, and fine arts. By the side of all these there are private schools, independent of, but supervised by, the state. All education, except private, is free throughout

the country and no religious instruction is permitted in any of the public schools.

Central authority. — At the head of the whole system stands the Minister of Public Instruction, but the direct supervision of each branch of education is intrusted to special councils, located in Montevideo. Thus there is a National Council for Elementary Education and the Training of Teachers (*Consejo Nacional de Enseñanza Primaria y Normal*), and a Central Council for University Education, to which are subordinated a number of other councils, one for each professional faculty and one for secondary education — Council of the Section for Secondary and Preparatory Education (*Consejo de Sección de Enseñanza Secundaria y Preparatoria*); other institutions not associated with the University also have their own councils.

Local authorities. — Local administration is in the hands of Departmental Commissions of Public Instruction (*Comisiones Departamentales de Instrucción Pública*). These commissions, which are appointed by the municipal councils under the Organic Law for the Government and Administration of Departments (*Ley Orgánica del Gobierno y Administración de los Departamentos*), consist of the departmental inspector and four members appointed by the municipal council. Among other functions the commissions select the sites for schools in the departments, supervise the sanitary conditions in them, enter into contracts for renting buildings for schools, nominate the examining boards, prepare the departmental budgets, etc. The scope of their activity, however, is limited to elementary education and restricted to the external affairs of the schools. They cannot appoint or dismiss teachers or interfere in any way in the conduct of the schools.

Inspection and supervision. — The central authority is represented in the departments by its inspectors, who com-

bine the duties of supervisors and administrators. The inspectors in the field fall into three classes: the regional inspectors, of whom there are three with oversight over six departments each; the departmental inspectors, of whom there are eighteen, or one for each department outside of the capital; and a number of subinspectors in each department. The regional inspectors have their headquarters in the capital; the other inspectors live in the departments.

In addition to these inspectors there is a corps of inspectors associated with the central office in Montevideo, whose function is not so much field work as the continuous study of educational problems with a view to the improvement of the system, the inspection of normal schools, and the preparation of special reports for the Council for Elementary Education.

The inspectors are appointed by the National Council of Administration, a body which under the constitution of 1918 is virtually coördinate with the President of the Republic, on the nomination of the Council for Elementary Education.

The state reserves the right of inspecting private schools with special reference to the observance of the sanitary regulations for schools and to see that nothing is taught that is contrary to morals. The inspection of private schools is in the hands of an Inspector of Private Schools in Montevideo and of the departmental inspectors elsewhere.

Educational finance. — The whole cost of education is met by the state except in the case of private schools. The funds are provided from national revenues, an education tax, and several other taxes such as that on absenteeism.

ELEMENTARY EDUCATION

Compulsory attendance. — The law requires children between the ages of six and fourteen to attend school. Until 1924, however, no provision was made to conduct a school

census. Nevertheless, the census of that year undertook to discover the number and location of illiterates. The Council for Elementary Education resolved to intrust the task to its inspectors, the teachers, and the protective commissions, and to secure the assistance of the chiefs of police and the local magistrates. As a result a school census was taken throughout the Republic in December, 1924, at a very small cost. The number canvassed was 202,637, of whom 61,519 were found to be illiterate. The percentage for the country was 30.36, ranging from 10 per cent in Montevideo to 54.16 per cent in the Department of Rivera.

Elementary schools. — The present system and organization is based on the Common School Law (*Ley de Educación Común*) passed in 1877. The author of the law, José Pedro Varela, had been strongly influenced by his personal study of education in the United States; much in the present system, particularly in the curriculum, still bears the signs of the influences of that period. From 1877 to 1918 the administration of elementary education was in the hands of a General Direction of Public Instruction (*Dirección General de Instrucción Pública*), which was replaced at the latter date by the Council for Elementary Education and the Training of Teachers. The Council consists of a director-general and six members, all appointed by the National Council of Administration. The director holds office for three years, the other members for two years, but are eligible for reëlection. One third of the members go out of office each year.

The Council has charge of all matters affecting elementary education and the training of teachers; it appoints the teachers, draws up courses of study, prepares the budget for elementary education, and administers the funds assigned to it by the state.

Types of schools. — The following types of schools are administered by the Council:

1. *Schools of the first, second, and third grades.* Schools of the first grade give the first four years of elementary education; schools of the second grade the work of the fifth and sixth years; and schools of the third grade, of which there are only two located in Montevideo, the work of the seventh and eighth years.

2. *Rural schools*, which offer only three years of work.

3. *Training schools (escuelas de aplicación)*, of which there are three in Montevideo to furnish facilities for observation and practice teaching for the students in the normal schools.

4. *Special schools*, such as the kindergarten, the school for deaf-mutes, and the open-air schools, which have their own special courses of study and their appropriate methods.

5. *Adult evening courses*, which give both elementary education and elementary courses in industry and commerce.

Curriculum of elementary schools. — Two courses of study are in force at the present time, one analytical and the other synthetic. The Council for Elementary Education has decided to undertake the revision of both and to study a third course recently proposed by the inspectors and principals of the normal schools and the director of the Museo Pedagógico. This last course of study and the suggestions accompanying it are to be looked upon by the teachers as a guide and not as a collection of inflexible standards that limit their independence and initiative. Further, the teachers are expected to organize the instruction in all subjects in view of the needs of the locality in which their schools are located, a procedure which is made possible without danger to the course on account of the flexibility that is encouraged.

The proposed program introduces a new preparatory course for pupils from six to seven years of age who enter school without any previous education. The course of study is as follows:

Preparatory: Introduction to the work of the first year with special attention to the development of moral and intellectual habits.

First Year: The vernacular with reading and written and oral language. Arithmetic and geometry. Man and nature with lessons on anatomy, physiology, and hygiene. Life of the community; resources and activities. Moral instruction. Persons who work for me. Persons who need my aid. Appropriate tales. Geography. Animal and vegetable life. Drawing. Manual work. Singing.

Second Year: Reading, written and oral language. Arithmetic and geometry. Man and nature. Anatomy, physiology, and hygiene. Life of the community; resources and activities. Persons who work for me. Persons who need my aid. Heroes of legend. Stories. Geography. Animal and vegetable life. Drawing. Manual work. Singing.

Third Year: Reading, written and oral language. Arithmetic and geometry. Man and nature. Anatomy, physiology, and hygiene. Life of the community; resources and activities. Moral instruction dealing with such themes as the individual, the family, the home, society. Heroes of legend. Readings. History. Geography. Animal and vegetable life. Writing. Drawing. Manual work. Singing.

Fourth Year: Reading, written and oral language. Arithmetic and geometry. Man and nature. Anatomy, physiology, and hygiene. Life of the community; resources and activities. Domestic economy. Moral instruction. Personal hygiene. Property. Worth. Social standards in the family and society. Biographies. Heroes of legend. Readings. History; discovery and conquest. Geography. Animal and vegetable life. Physical phenomena. Writing. Drawing. Manual work. Singing.

Fifth Year: Reading, written and oral language. Arithmetic and geometry. Man and nature. Anatomy, physiology, and hygiene. Life of the community; resources and activities. Domestic economy. Moral instruction, individual, with lessons on the body. Honesty. Per-

severance. Manners. Worth. Social standards in the family, home, and society. Biographies. Heroes of legend. Readings. History. Civics. Geography. Study of the map of the Republic. Animal and vegetable life. Physical and chemical phenomena. Writing. Drawing. Manual work. Singing.

Sixth Year: Reading, written and oral language. Arithmetic and geometry. Man and nature. Anatomy, physiology, and hygiene. Life in the community; resources and activities. Domestic economy. Simple notions of child psychology. Moral instruction, with lessons for the individual on habits, loyalties, thrift, truth, manners, happiness, conscience, the family and affections, friendship and love, society. Biographies. Heroes of legend. Readings. History. Civics. Geography. Study of the map of the Republic. Animal and vegetable life. Physical and chemical phenomena. Writing. Drawing. Manual work. Singing.

TEACHERS

Teacher training. — Two classes of teachers are employed, some trained in normal schools (*normalistas*), others prepared privately and examined by the state (*nacionalistas*). There are two normal schools, one for women and one for men, both located in Montevideo and associated with demonstration schools (*escuelas de aplicación*) and practice schools (*escuelas de práctica*). Candidates until 1925 were admitted at the age of fourteen and the course was four years in length. In 1925 the course was extended by two years by lowering the age of admission to twelve. The curriculum planned for the new six-year course is divided into two cycles, academic and professional, as follows:

Academic Subjects:

First Year. — Mathematics, language, universal history, geography, natural history, French, sol-fa, drawing, gymnastics.

Second Year. — Mathematics, language, universal history, geography, natural history, French, cosmography, physics, drawing, singing, gymnastics.

Third Year. — Mathematics, literature, American history, morals, natural history, physics, chemistry, manual work, singing, gymnastics.

Fourth Year. — Domestic economy, literature, national history and constitution, psychology, education, agriculture, chemistry, sociology, political economy, manual work, singing, gymnastics.

Professional Subjects:

Fifth Year. — Domestic economy (practical), reading, education, agriculture (practical), caligraphy, drawing, singing, gymnastics, practice teaching.

Sixth Year. — Philosophy, experimental psychology and education, education, manual work, practice teaching.

Up to the present only the course of study for the first year has been issued. Students who have completed the first four years of secondary education (*liceo*) may be admitted to the fifth year. Promotion from one year to the next depends on passing an examination, written and oral, before specially appointed boards which also conduct the final examinations at the end of the course. Graduates of the course are known as *normalistas* and are distinguished from teachers who are licensed by examination alone (*nacionalistas*). The latter must meet the same requirements in subject matter as the former, and are required to engage in practice teaching under the supervision of the local inspector for two years and finish their preparation by at least one month of practice under supervision in Montevideo.

Teachers are appointed by the central authority in the capital, so that teachers are civil servants responsible to the Council for Elementary Education and not to the local commissions. Appointments are made here as in all cases by competition either on the basis of merit (*concurso de méritos*) or by examination (*concurso de oposición*), the Council decid-

ing the method to be used in each case. The teachers enjoy permanent tenure, fixed scales of salary, in many cases the use of a house (for principals), and the right to a pension. Teachers may rise from one grade of school to another by examination. The monthly salaries, paid throughout the year, range from \$63 to \$155. Great difficulty is being found in securing teachers for rural schools, due mainly to the decreasing supply of men needed in the outlying regions, with the result that many are appointed on very low requirements. While there is a special course for the rural schools, there are no special courses for the preparation of the teachers for them except through vacation courses and meetings under the inspectors.

SECONDARY AND PREPARATORY EDUCATION

Administration. — In 1908 a Section of Secondary and Preparatory Education was established, attached to the University, and administered by a Council which is subordinate to the Council of the University. The Council for Secondary and Preparatory Education consists of a dean, appointed by the National Council of Administration, five members selected by the Council of the University, and one representative of each of the faculties of medicine, law, engineering, architecture, dentistry, and agriculture. This Council has complete charge of secondary and preparatory education.

Secondary education. — Secondary education proper is given in four-year courses in the public *liceos*, of which there are two in Montevideo and one in the capital of each department, and in the University for Women in Montevideo. There are in addition many private schools, some "free" or entirely unsupervised, others state-recognized (*habilitados*); these are found throughout the country. This distinction has a further effect in the examinations. The students in the *liceos* and in the recognized private

schools are known as *reglamentados*, and may be examined only on the work actually completed in the courses; the students in the "free" secondary schools are known as *libres* and may be examined on the full program prescribed for the secondary schools. This distinction is found throughout the educational system. No fees are charged in the *liceos* and a number of scholarships are available.

To be admitted to the secondary schools pupils must be twelve years of age and must pass an entrance examination, unless they have completed the work of a third-grade elementary school in Montevideo or of a second-grade school elsewhere. The entrance examination consists of a written and oral examination in national history, arithmetic, Castilian, and descriptive geometry. The written examination is eliminatory.

Curriculum.—The curriculum and courses of study are prescribed in detail by the Council for Secondary and Preparatory Education, approved by the superior authorities. They furnish the basis for the annual examinations at the end of each year. The curriculum consists of the following subjects :

SUBJECTS	1	2	3	4	YEAR
Mathematics	4	4	3	3	
Castilian	5	3	3	3	
History, American and National	3	2	—	—	
History, universal	—	—	3	3	
Natural history	3	3	—	—	
French	3	3	3	3	
Drawing	3	3	—	—	
Geography	3	—	3	—	
English or German	—	3	3	3	
Physics	—	3	3	—	
Chemistry	—	—	3	3	
Commerce	—	—	3	—	
Industries	—	—	—	3	
Moral instruction and civics	—	—	—	4	
Cosmography	—	—	—	2	
Total	24	24	27	27 hours per week	

There are no electives, and all the subjects of the course must be taken by all the pupils, the only opportunity for choice being between English and German. All pupils are required to attend the courses in gymnastics given by the National Commission for Physical Education at such hours as do not conflict with the regular programs of the schools.

Public examinations are held at the end of each year, and promotions from one year to another depend on passing these examinations successfully. A supplementary examination is held shortly before the beginning of each year to enable those who have failed in some subjects to make up their deficiencies.

Tendencies in secondary education. — The aim of the present courses is to give a thorough general and liberal education. In actual practice the majority of the students plan to proceed to the University and to obtain professional degrees. The result of this and of the examinations is to give the courses a preparatory character dominated wholly by the University. The absence of differentiation and the emphasis on university preparation bring about a mortality of about forty per cent in the first two years. At present there is a tendency among all those interested in public education to free secondary education wholly from the University and to make secondary education an end in itself instead of a means.

Preparatory education. — The purpose of the preparatory course is to give specialized and differentiated courses for entrance to the various faculties of the University. Although the courses are drawn up by the Council for Secondary and Preparatory Education, they must be approved by the respective faculties for which they prepare. The courses are two years in length for entrance to the faculties of medicine, law, engineering, architecture, and land surveying,

and one year for entrance to the study of dentistry and pharmacy. Preparatory courses are not required for admission to the study of veterinary medicine, agriculture, notarial courses, and commerce, for which graduation from the *liceos* is accepted. Only five institutions in all offer preparatory courses; these are the Instituto Vasquez Acevedo, the University for Women, and a night *liceo* in Montevideo, and the secondary schools in Salto and Paysandu. Students who do not have opportunities for regular preparation may prepare themselves privately and take the necessary examinations for entrance to the faculties as "free" students.

The preparatory courses continue some of the general cultural studies of the secondary school and add subjects specially required as a foundation for the respective professional courses.

Teachers. — There is no provision for training secondary teachers, only a small percentage of whom are teachers by profession. The large majority are graduates of the University in some one or other of the professional courses and generally engage in the pursuit of their profession or hold positions in government offices, while giving a number of hours a week to teaching. Teachers are required to give a minimum of nine hours and a maximum of eighteen hours a week to teaching. The title of "professor" is employed for secondary-school teachers in distinction from the title of "maestro," used for elementary-school teachers.

The salaries are \$45 a month for each group taught for three hours a week. Thus the teacher who has the minimum number of groups, three, and teaches nine hours a week receives \$135 a month. The maximum is \$270 a month. Salaries are paid during the time that schools are closed for vacations, and additional emoluments are paid to those teachers from the capital who are sent out to examine

the departmental *liceos*. The secondary school teachers also have a right to a pension towards which they are required to contribute.

VOCATIONAL EDUCATION

Vocational education has only been provided for seven years, but has made considerable progress and has met with much success. It is administered under the Ministry of Industries by a Superior Council and a National Inspector, who is a member of the Council. There are at present four day schools and nine night schools in Montevideo and its environs, and seven schools in the rest of the country, at Canelones, San José, Florida, San Carlos, Paysandu, Salto, and Rivera. It is expected that two more schools will shortly be opened in the departments of Rocha and Soriano.

Two of the schools in Montevideo give specialized instruction, one preparing for the building trades, including plumbing, and positions as assistants to engineers and architects; the other trains mechanics and electricians. One school is exclusively for women and provides special courses in women's work — dressmaking, embroidery, linen work, and so on. The fourth school is general in character and has shops in carpentry, cabinet-making, and inlay work, decorative painting, modeling, printing, and bookbinding.

Since drawing and mathematics constitute the basis of all industrial training, these subjects have an important place in all the courses and are required of all students. The latest exhibition of the work of these schools in 1924 served as a noteworthy testimony to this instruction, especially in drawing on its technical as well as on its artistic sides.

The vocational schools in the country, established in 1920, in addition to the courses in drawing and mathematics, provide work in a number of workshops, especially for the repair of agricultural and rural tools and implements, spinning, car-

pet-weaving, making of hats and flowers, dressmaking and lingerie, cabinet-making, etc.

Students who have completed the work of the first four years of the elementary school and have reached the age of fourteen are admitted to the day schools. The minimum age requirement for admission to the night courses is seventeen. The total number of students in the vocational schools in 1914 was 5330 (2764 men and 2566 women).

The central institution in Montevideo has a library containing books and magazines on vocational education, which are loaned out to the public, workmen and others interested in the subject. A Technological Museum is attached to the library and is of great service for technical vocational instruction.

MEDICAL AND SOCIAL WORK

School medical inspection. — The system of school medical inspection was established in 1908. The functions of the offices of the school medical council (*Cuerpo Médico Escolar*) include the medical inspection of school children, teachers, and students in the normal schools; the supervision of school buildings; the provision of school clinics; and supervision of the open-air schools. The school medical service is still inadequate and only about one fifth of the pupils can be examined each year. In Montevideo there are four dental clinics, one clinic for the throat, nose, and ears, and one ophthalmological clinic.

There have grown up for the promotion of the general welfare of the school children a number of voluntary organizations known as public commissions for the protection of school children (*Comisiones Populares de Protección Escolar*). Originally organized to promote school attendance, these commissions now distribute clothing to needy children, provide food where necessary, and raise money to supply a cup of milk (*copa de leche*) to the school children in a large

number of schools either daily or as often as possible. The money for these commissions is raised by subscriptions and entertainments ; more recently the state has begun to make a contribution to the work.

Physical education. — Physical education in all types of educational institutions is in the hands of the National Commission for Physical Education (*Comisión Nacional de Educación Física*). The organization is part of a general movement for the improvement of national health and intellectual vigor, physical recreation, and the development of character. The program of physical education includes not only corrective gymnastics, but theoretical and practical instruction in hygiene, medical and anthropometric examinations, examinations of the mouth, and everything else that is found to-day in the most advanced programs of scientific physical education. The Commission has charge in addition of the supervision and promotion of all kinds of athletic activities throughout the country, which it has provided with a large number of playgrounds and athletic fields (*plazas de deportes*).

Five hours a week are set aside in the elementary schools for physical exercises and games. This time is divided as follows : four periods of half an hour each per week for exercises and games in the schools, and three hours per week for physical education in the recognized playgrounds.

The Commission has a competent body of trained physical supervisors, doctors, and dentists who coöperate efficiently in promoting the ideals for which the Commission was created. A number of the physical directors received their training in the United States.

UNIVERSITY EDUCATION

The University of Montevideo is the only university in the country. It consists of a number of faculties as follows :

medicine, including pharmacy and dentistry; law and social sciences; engineering and allied subjects; architecture and allied subjects. Each faculty has its own council, which is subordinate to the Central Council of the University. It will be noticed that the work of the University is limited wholly to giving professional preparation; there are no facilities for general advanced studies in other fields such as are found in faculties of arts and sciences or of philosophy elsewhere.

Students are admitted to the faculties on completing the requirements of the various preparatory courses mentioned earlier. The length of the courses is six years for medicine, and five years in law, engineering, and architecture. Pharmacy, dentistry, and notarial science require three years, and land surveying two years. There were enrolled in the University in 1924 about 2400 students, of whom some 800 were in the medical faculty and an almost equal number in the faculty of architecture. In addition to the regularly enrolled students a large number of others present themselves for the examinations in the various faculties as "free" (*libres*) students.

The University for Women in Montevideo is not a university in the accepted sense. It provides secondary education following the same program as the *liceos* and may establish preparatory courses for the different faculties where the number of students warrants it. The institution does not give any professional work. Girls and women are admitted to the *liceos*, preparatory courses, and faculties of the University.

Side by side with the University there are other institutions of a professional character, but distinguished from the faculties in requiring only graduation from the *liceo* or its equivalent for entrance. These institutions are as follows:

High School of Commerce (*Escuela Superior de Comercio*).

— This school gives a four-year course preparing for the occupations of public translator, public accountant, and the consular service, as well as for various careers in business and banking. At present there is a proposal to change the school into a faculty of economic sciences in the University with the right to grant the degree of doctor in economic sciences, business management, public accountancy, commerce, and consular service. The enrollment in 1925 was about 50.

Institute of Industrial Chemistry (*Instituto de Química Industrial*). — This institution, established in 1912, is under the direction of a Harvard graduate, Dr. Latham Clarke. It is administered by its own Council under the Ministry of Industries. In 1915 there was attached to the institution a factory for manufacturing chemical products, to which there was subsequently added the production of sulphuric acid and superphosphates of calcium, etc.

Students must be graduates of a *liceo* and must pass an entrance examination. The duration of the course is five years, at the end of which the title of Industrial Chemist is conferred. The Institute is one of the few in the country in which students actually engage in the producing side of their studies as well as the theoretical. The number of students is about twenty-five.

College of Agriculture (*Colegio de Agronomía*). — The College of Agriculture was established in 1907 and is located at Sayago, near Montevideo. It is under the supervision of the Ministry of Public Instruction and is administered by a special Council. A four-year course is offered leading to the degree of Engineer in Agriculture. The enrollment is about seventy, but the number who complete the course is very small. In 1925 the College was made a faculty of the University.

Veterinary School (*Escuela de Veterinaria*). — This institution, administered by a Council under the Ministry of Public Instruction, consists of a number of special institutes, the Institute of Normal Anatomy, Institute of Physiology, Institute of Bacteriology, Institute of Animal Pathology and Parasitology, and Institute of Animal Industry. A hospital is also attached to the School, which is thus a research as well as a teaching institution and is intrusted with the manufacture of serums for the state.

Students are admitted on completing the work of a *liceo*, and after a course of four years may obtain the degree of Doctor of Veterinary Medicine. The annual enrollment is about thirty.

STATISTICS

Elementary Education. — In 1924 there were the following elementary schools in the country :

	URBAN	RURAL	TOTAL
Public	259	803	1062
Private	108	40	148
Total	367	843	1210

Of the public schools 71 were for boys, 42 for girls, and 949 were mixed ; of the private schools 42 were for boys, 32 for girls, and 72 were mixed.

The total number of pupils in elementary schools was 138,492, of whom 121,412 were in public schools and 17,080 in private schools. Of the public-school pupils 63,635 were boys and 57,777 were girls ; in the private schools 7692 were boys and 9388 were girls. 71,338 of the public-school pupils attended urban schools and 50,074 were in rural schools ; of the private-school pupils 13,780 were in urban schools and the remainder were in rural schools. Less than

4 per cent of the pupils were foreigners. The attendance throughout the country showed an average of 76 per cent with a range from 66 per cent to 82 per cent in Montevideo. The average attendance in private schools was 80 per cent.

The elementary schools employed 2827 teachers (275 men and 2552 women). In the private schools there were 605 teachers (173 men and 432 women).

Secondary schools. — In 1924 the enrollment in secondary and preparatory courses was 6662, of whom 4500 were attending schools in Montevideo and the rest were distributed among the departmental schools. There were in this year 533 teachers employed in the secondary schools of the country.

Cost of education. — The cost of elementary education in 1924 rose to nearly four million pesos (the par value of the peso is about \$1.04), and was met by the following revenues:

Inheritance tax	\$727,808.46
Town school tax	236,434.90
Rural school tax	2,278.90
Tax on stone and sand	144,748.25
Dog licenses	8,349.00
Miscellaneous	1,594.26
Unclaimed inheritance	1,882.91
Fines	2,219.09
Tax on dressed beef	323,093.25
School taxes collected by the departments	342,324.85
State appropriation	2,161,871.16

For secondary and higher education the sum of \$1,169,654 was provided in the budget for 1924-25. For the College of Agriculture, the Veterinary School, the School of Commerce, and the Institute of Industrial Chemistry an additional sum of \$251,576 was provided, and for vocational education \$290,416.

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PART II

THE PROBLEM OF THE ELEMENTARY
SCHOOL CURRICULUM, ENGLAND

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THE ELEMENTARY SCHOOL CURRICULUM IN ENGLAND

AUTHORITIES FOR ELEMENTARY EDUCATION

The public elementary-school system of England and Wales is provided, maintained, and administered under the authority of and in accordance with the provisions of a comprehensive Act of Parliament of 1921, which codified the still operative provisions of a number of previous Acts, the most important being those passed in 1870, 1902, and 1918. All these Acts applied to England and Wales as a whole, but there has been a growing tendency to accord Wales a certain amount of differential treatment and autonomy. What is said in this article will, therefore, be limited to England, although as a matter of fact it will be generally true also of elementary education in the principality of Wales.

The supreme administrative authority, controlling all grades of education in so far as they are aided by public funds, is the Board of Education.¹ The funds required for the service of the Board are voted annually by Parliament, which finds in this connection an important opportunity for criticizing and influencing the general educational policy of the country.

But the Board of Education, although the supreme, is not the sole authority responsible for elementary education. In

¹ For a detailed account of the administration of education in England see the *Educational Yearbook, 1924*, pp. 195 ff., and the article on England in the present volume.

particular it does not itself provide either the school buildings or the teachers; it merely prescribes the standards for the buildings, staffing, and equipment, which must be complied with if a school is to be recognized for assistance from the funds voted by Parliament. The elementary schools of England are derived from two sources: roughly one half were established (mainly before 1903) by voluntary religious associations which still own and are required to maintain the fabrics; the others have been built and are maintained by public authorities. These authorities, set up in their present form by the Act of 1902, are of two grades: County Councils and County Borough Councils which have power, under Part II of the Act, to provide higher as well as elementary education within their areas; and the Borough Councils and the Urban District Councils, serving smaller populations, which, under Part III of the Act, are concerned only with elementary education. It may be observed in passing that, in view of the present strong movement towards a thorough reorganization and more complete unification of the educational system, the existence of "Part III Authorities" with their limited but tenaciously held powers offers a problem of considerable difficulty.

It is significant that during the period 1903-24 the number of "voluntary schools" has shrunk from 13,438 accommodating 3,571,425 children to 11,166 accommodating 2,560,825 children; while the "council schools" have increased in number from 5049 to 7675 and in accommodation from 2,753,765 to 3,958,363. These figures explain the repeated efforts that have been made, hitherto without success, to discover some acceptable arrangement under which the local authorities could become fully possessed of all the school buildings in their areas and the voluntary bodies be relieved of the increasing burden of maintaining them, while still retaining the right to give the

distinctive religious instruction which constitutes the only difference between the teaching provided in the two kinds of schools.

THE CODE

The Board of Education's *Code of Regulations for Public Elementary Schools* lays down the main conditions under which grants will be given to local educational authorities throughout the country. In conformity with the theory that the function of the state is to assist and foster rather than directly to provide the education of the people, the regulations are of a more general, less detailed character than those of some other national systems. It might in fact be said that they outline broadly the Board's concept of the proper character and the work of an elementary school, but leave to the local authorities and to the teachers a considerable amount of freedom in making the concept concrete. Thus the business of the Board's inspectors — a body of men and women of high attainments and character — is in the first place to see that the general requirements are complied with, and after that to encourage local initiative by criticism and suggestion rather than to impose upon the schools official programs and methods.

This is particularly true of curricula and syllabi, which we have here mainly to consider. For instance, all that the *Code* has to say about the teaching of infants (who are not defined, but may be taken to be children under 8 and mainly under $7\frac{1}{2}$ years) is contained in four brief sections, prefaced by the remark that the principal aim, in this part of a school, should be to provide the children with opportunities of free development of their bodies and minds and for the formation of habits of obedience and attention. The first three of the sections which indicate how this aim is to be worked out prescribe the use of games, singing, and breathing exer-

cises as the proper means of physical training ; free occupations for training eyes, hands, and fingers ; the hearing and repeating of stories as the beginning of intellectual and linguistic training ; and (for older infants) the learning of reading, writing, singing, and the rudiments of drawing and number. The fourth section permits older infants to sew and knit provided that care is taken to avoid injury to eyesight.

It is evident that this very general prescription may be carried out in a variety of ways, and as a matter of fact teachers make a wide use of the freedom left to them. While in the majority of schools the teaching of infants follows broadly the Froebelian tradition, there are a few, in London and elsewhere, where at least for the younger children the Montessori method is applied in all its strictness, and a large number which have developed methods of " individual work " inspired by Dr. Montessori's doctrine though not restricted to the canonical practice.

As regards the children who have emerged from infancy and are ready for formal studies along the lines of the recognized " subjects," the *Code* is more explicit but still avoids limiting unnecessarily the judgment and initiative of the teachers. The curriculum, it states, should consist of teaching in the mother tongue, handwriting, arithmetic ; practical subjects such as handicrafts and gardening, and (for girls) cookery, laundrywork, housewifery, and needlework ; nature study, geography, history, singing, and drawing ; hygiene and physical training. But it is explicitly added that not all these subjects must be taught in every school or class, and that the curriculum as a whole may be varied when modification seems to be required by the needs of the children or the circumstances of the school, or is justified for the purposes of experiment.

Under each subject heading there is a brief statement of the proper aim of the teaching and a general indication of the

range it may be expected to cover; and there are in some cases prescriptions or suggestions of a more detailed and technical character. For instance, it is laid down that English grammar, if taught, should be confined to the higher classes and should be limited to enabling the children to understand the structure of the sentences they speak, read, or write; teachers are informed that they need not confine their history lessons to English or British history, and are reminded that in the higher classes the curriculum in this subject may with advantage include lessons on citizenship; in singing they are told to use national and folksongs freely; and so on. Official programs are referred to in connection with only one subject, namely, hygiene and physical training. Here it is stated that the Board's syllabus of physical exercises must be followed, and that where lessons on temperance are given they should be in conformity with the Board's syllabus on the *Hygiene of Food and Drink*. This exception to a general rule is explained by its connection with the vigorous propaganda for improvement of the national health and physique (due mainly to the Chief Medical Officer, Sir George Newman) which was instituted as the result of discoveries made in the course of earlier official medical inspection of school children and in the examination of recruits during the War.

It will be observed that moral instruction is not specified as a subject; but the *Code* nevertheless emphasizes its importance as an element in the curriculum of every elementary school. Morality may be taught systematically and as a course of graduated instruction; but the teachers are left free to give their teaching, if they prefer, incidentally and occasionally as fitting opportunity arises. The second method is so much in accord with the traditions, instincts, and prejudices of the average Englishman that, in spite of the able propaganda of the Moral Instruction League, sys-

tematic lessons on morals are given in comparatively few schools. In the vast majority the teachers are content to instil moral ideas and to train their pupils' ethical impulses through the medium of Bible lessons, lessons in history and literature, and above all through the discipline of the social life of the school, in the classroom, and on the playground. Many teachers, especially the younger men in boys' schools, devote their leisure freely to helping their pupils in out-of-school games, and seek here their opportunity of inculcating the "good sportsmanship" which plays so important a part in the national conception of a sound character. Many, again, with the same moral purpose in view, give voluntary service as scoutmasters or officers of Girl Guides; and the school journey, which was developing into an important feature of elementary school life before the days of financial stringency, was and still is valued largely for the chances it gave of practical but entirely informal ethical training.

Instruction in religious subjects is permitted by the *Code* but not prescribed; nor do the Board's inspectors take cognizance of it where it is given. The "voluntary" schools naturally offer religious instruction in accordance with the tenets and practice of the organizations which own the buildings; as we have already indicated, to give this instruction is the sole reason for their existence as a partly independent group within the national system. Whether religious instruction shall be given in a "provided" school is determined by the local authority. It is, in fact, almost if not absolutely universal, but is regulated by the famous "Cowper-Temple" clause in the Act of 1870 which forbids the teaching of any religious catechism or religious formulary distinctive of a particular denomination. Freedom of conscience is further safeguarded by the rule that parents may withdraw their children from religious lessons without contravening the law of school attendance.

In the voluntary schools religious instruction is often given by clergymen of the Church of England, by Roman Catholic priests, and by the ministers of other churches; but the Board will not recognize any such person as part of the staff of a school. This rule of the *Code* is intended to secure that denominational religious instruction shall not be provided at the public expense.

THE BOARD'S "SUGGESTIONS"

The directions and recommendations of the *Code* with regard to the aims and programs of instruction in the several subjects of the curriculum are supplemented in a separate official publication which bears the title *Suggestions for the Consideration of Teachers and Others concerned in the Work of Public Elementary Schools*. The latest edition (1923) of this work is a tract of 149 pages constituting a valuable short treatise upon the curriculum, syllabi, and methods appropriate to elementary education. As the title indicates, it is neither dogmatic in tone nor intended to present a scheme which teachers must follow. But the articles on the teaching of the several subjects have been drafted mainly by inspectors of great experience and have been published only after passing the criticism of expert teachers and other recognized authorities; they have, therefore, naturally exercised a strong influence on the practice of the schools, particularly among the more intelligent teachers.

The special articles are prefaced by an introductory chapter on *The School and the Teacher*. Here, in addition to a brief discussion of the main aspects of the life and work of an elementary school, in which such subjects as school discipline, moral instruction, promotion, and the treatment of backward children are dealt with in a summary and practical way, it is pointed out that the course of a child who enters an elementary school at the age of five or six may

usefully be considered as falling into three main stages. These are distinguished as the junior stage lasting until the ninth or tenth year, the middle stage covering the next two or three years, and the senior stage upon which the average child enters after the age of eleven.

This division is followed in the methodical articles which take up the rest of the pamphlet; it cannot be characterized here in detail, but mention must be made of certain ideas which are expressed in it. The first is that the education of the younger children, which has hitherto suffered, at least in urban schools, a rather drastic break in method and discipline on the promotion of the child from the "infants' department" to the "senior department," should have a longer range through which it preserves the same character. Even where the existing school buildings and the traditional organization require a child's transference from one autonomous department to another, the heads of those departments are urged to coöperate in such a way as to secure continuity and to avoid wasteful overlapping; and a plain hint is given that the retention of children under the same direction until they reach the age of 8 or even 9 years has great advantages.

The leading note of the section on the senior stage is critical, though important constructive suggestions are made. We meet the verdict, constantly repeated in reports on the English elementary schools and implied in an important section of the Education Act of 1918, that it is in this stage that improvement is most needed. Too little is done, it is said, to meet the specific needs of the older children as they approach the leaving age, and the work too often involves little beyond a repetition of the lessons and exercises of the middle stage. The schools are urged to extend to all the older scholars the courses in handicraft, gardening, or domestic subjects which at present are accessible only to some of the children who are of an age to profit by them; methods of

private study should have a much larger place than is now usual, so that self-education may be the "key-note of the older children's curriculum just as free expression is of the youngest children's"; and teachers are advised, while abstaining from the introduction of new subjects, to see that the old ones are carried forward to more advanced stages congruent with the more developed minds of the pupils, and forming a fitting preparation for subsequent study in continuation classes.

The unfavorable judgment upon much of the senior work of the schools which is implied in these recommendations is undoubtedly well-founded. One cause of a state of affairs widely recognized to be unsatisfactory is that the leaving age was raised universally to 14 only as recently as 1918. A still more important factor is to be found in the widely prevalent arrangement by which the schools are "skimmed" of their brighter pupils at about the age of 11, those of outstanding ability being transferred with the assistance of maintenance grants to the secondary schools, while in the larger towns many children of the next grade of ability are provided for in "central" schools, where they enjoy a curriculum akin to that of the junior high schools in the United States. Teachers often complain that the removal of the better brains accounts for the relatively poor work of the higher classes left on their hands; but the truth is rather that the problem of dealing with the children from 11 to 14 or 15 who complete their schooling in the ordinary elementary schools has not hitherto been adequately thought out.

This problem has been referred by the Board of Education to its Consultative Committee,¹ who have taken much evi-

¹ The Consultative Committee is a purely advisory body, set up by statute and so constituted "that it shall always consist as to not less than two thirds of the members thereof of persons qualified to represent the views of the universities and other bodies interested in education." The members of the Committee are appointed by the King in Council.

dence and may be expected before long to issue their report. The reference to the Committee is to advise the Board how effect should be given to the section of the Act of 1918 (repeated in the consolidating Act of 1921) which lays upon local authorities the duty of organizing in the public elementary schools courses of advanced instruction for the older or more intelligent children, including those who stay at such schools beyond the age of 14.¹ The recommendations of the Committee will no doubt include alternatives designed to meet the varying conditions and educational possibilities in the larger and smaller towns and the rural districts. It may be anticipated that they will advise a wide expansion of the rapidly growing provision of "central" schools, that is, schools which recruit their pupils at the age of 11 from a group of contributory schools. These are and will probably continue to be of two types, selective and nonselective. Selective central schools are in effect junior secondary schools, though they are conducted under the legislation applicable to elementary schools. The fact that they are historically outgrowths from the elementary system is the reason why this is so; and the economy of arrangement is a regrettably strong reason why it should remain so. London is well supplied with schools of the selective type, and they are obviously suitable for the conditions in large cities. The nonselective central schools are, on the other hand, found chiefly in country districts, where it is possible to concentrate all the older children from a group of village schools in an institution provided with a staff and equipment necessary for the "advanced instruction" which, by the recent Act of Parliament, the local authorities must supply.

¹ The Act limits the provision of education in the elementary schools (normally) to the age of 16, and permits local authorities to make a by-law requiring all children in the area to attend school until 15. The minimum leaving age fixed by the Act is 14.

Where the brighter children are transferred at 11 to secondary or selective central schools, there arises in its clearest form the problem raised by the Board in its *Suggestions*, namely, the problem of providing a suitable "senior stage" of instruction for children for whom, on the whole, the literary and scientific work of the secondary and selective central schools is unprofitable. We have seen what the *Suggestions* say about this problem from the standpoint of the curriculum; but there is also a problem of organization. It is held by many educationists that the children here in view should also be transferred at 11 to a fresh educational institution with its own government and staff, and a distinctive aim and program; and under the name "senior schools" there are to be found a good many institutions of this type in London and elsewhere.

If the tendency represented by the "senior schools" proceeded to its logical termination, the historic conception of the elementary school would be greatly modified. The present institutions, truncated of their higher classes, would cease to provide the whole of education, from 5 to 14, of the masses of the people; they would become primary schools, in the proper sense of the term, supplying an education preparatory to various types of education beyond the age of 11. But though there will probably be in England important developments in this direction, the diversity of conditions between urban and rural districts and the historical momentum resident in the present system are likely to preserve and to produce many complexities in the national scheme.

For the purposes of this article the term "elementary school" is taken to include the senior schools, but to exclude the selective central schools, whose curriculum is really a variation of the secondary-school curriculum, although officially they are still classed as elementary.

LOCAL PRESCRIPTIONS

As we have seen, the duty of providing public elementary schools lies upon the local authorities ; in other words it is their task to work out into concrete form the general ideas of the *Code*. Consequently one finds in the schools, imposed upon a common basis, a considerable variety. In part this variety is expressed in differences in the standards of school buildings and equipment, and of the numbers and qualifications of the staff, but where the administration is vigorous and enlightened it is also expressed in the curriculum. A great urban authority works out its own interpretation of the *Code*, and impresses a distinctive character upon all the schools in its area. For instance, it may equip central institutes for wood and metal work and for domestic subjects, and decree that these are to be used systematically by groups of schools ; it may, as London has done, establish an institute to which selected teachers are drafted to learn a specific syllabus of physical exercises ; it may establish courses of lectures and issue reports bearing on the teaching of other subjects of the curriculum ; it may permit and encourage school journeys, " wireless " concerts and lectures, and attendance at Shakespearian performances ; and it always employs its own inspectors to see that its ideas are carried out. Again, it is for the local authority to give, if it pleases, a rural bias or some other distinctive trend to the work of a particular school. This freedom to work out a characteristic concept of the school curriculum is naturally more in evidence in the central schools and other schools of special character, but it is also apparent in the ordinary elementary schools. Local authorities differ in the degree of control that they exercise over the initiative of their teachers. But while some aim at a considerable amount of standardization, the general tendency is to allow a large

degree of liberty to the individual school within the corners of the *Code*. Thus the strongest impression upon a foreign visitor to English elementary schools is usually made by their individuality rather than by their uniformity.

TIME SCHEDULES

The only official provisions with regard to the school time schedules (known in England as *time-tables*) are that religious instruction or observances must take place either at the beginning or at the end of a meeting (so that parents may withdraw their children from them if they wish) and that a minimum time must be provided for recreation. Subject to these restrictions the time schedule is drawn up by the head teacher, but it must be submitted to the Board's inspector and must have his approval.

Time schedules necessarily differ greatly with the circumstances of the school. Three specimens are here given, illustrative of the organization (*A*) of a one-teacher school; (*B*) of a village school under a county authority; and (*C*) of a large mixed city school.

(*A*) This is one of a number of schools, diminishing as transport facilities improve, of which each serves a small group of remote farms among the fells of the northern counties, and may have from 8 to 24 pupils ranging in age from 5 to 14 years. The children fall roughly into three sets: those who cannot yet read, write, or count and who require much attention from the teacher; those who can read and write well enough to use simple books with a great deal of help; and those who can be left to do a great part of their work with only occasional assistance. The teacher's problem is to arrange the time schedule so as to be able to divide her attention suitably among these sets. But none are homogeneous; for instance, in the school selected, it is necessary to classify the pupils into infants and senior children

School A		N. B. The hour 9.00-10.00 is given daily to registration and religious instruction. "Reading" for Standard V generally means silent reading.									
Class	10.00-10.45	10.45 to 11.00	11.00-11.30	11.30-12.00	1.00-2.00	2.00 to 2.10	2.10-2.40	2.40-3.10	3.10-3.30		
MONDAY	Infants	Occupations Numbers	Writing Letters	Clay modeling Word building	Boys: Drawing or Knitting Girls: Needlework	Recreation	Varied occu- pations	Singing	Physical exer- cises — Intelli- gence test		
	I and II	Tables Arithmetic	Composition	Reading	Boys: Drawing or Knitting Girls: Needlework		Word building	Singing	Physical exer- cises — Intelli- gence test		
	III, IV, V	Arithmetic	Reading	Composition	Boys: Drawing or Knitting Girls: Needlework		Reading	Singing	Handwork		
TUESDAY	Infants	Numbers Picture cutting	Word building Varied occu- pations	Writing	Paper folding Letters, story	Recreation	Writing Game	Recitation	Free drawing		
	I and II	Tables Arithmetic	Reading Varied occu- pations	Composition	Geography Composition		Tables Game	Recitation	Free drawing		
	III, IV, V	Arithmetic	Reading Geography	Reading	Reading		Recitation (Poetry, etc.)	Intelligence test	Observation		
WEDNESDAY	Infants	Raffia work Numbers	Word building Writing	Varied occu- pations	Boys: Knitting Girls: Needlework	Recreation	Word building Game	Picture cutting	Singing		
	I and II	Raffia work Numbers	Dictation	Reading	Boys: Knitting Girls: Needlework		History	Making scrap books	Singing		
	III, IV, V	Arithmetic	Reading	History	Boys: Knitting Girls: Needlework		Reading	General knowledge	Singing		

THURSDAY		FRIDAY									
Infants	Number puzzles	Recreation			Word building Clay modeling	Writing	Cutting out pictures Game	Recreation	Conversation lesson	Recitation	Drawing
I and II	Tables Arithmetic				Transcription	Reading	Cutting out pictures Game		Conversation lesson	Recitation	Drawing
III, IV, V	Arithmetic				Composition	Reading	Recitation		Intelligence test	Observation	Drawing
Infants	Writing figures Beadwork	Recreation			Cutting out Writing	Game	Boys: Knitting Girls: Home mending		Tablet laying	Story	Physical exercises (games)
I and II	Written arithmetic				Word forming	Game	Boys: Knitting Girls: Home mending		Tablet laying	Story	Physical exercises (games)
III, IV, V	Oral and written arithmetic				Reading	Composition	Boys: Knitting Girls: Home mending		Reading	Composition	Physical exercises (games)

9-9.35	CLASS	9.35-10.25	10.25-10.45	Recreation		11.00-12.00	2.00-3.05	Recreation	3.15-4.15	Prayers and Dismissal
Assembly and Registration Hymns, Prayers and Religious Instruction	I	Arithmetic	Physical Training	Recreation	English	English	Hist. or Geog. and English	Recreation	English and Music	Prayers and Dismissal
	II	Arithmetic	Physical Training			English	Hist. or Geog. and English		English and Music	
	III	English and Arith.	Physical Training			English	Hist. or Geog. and English		Nature Study and Music	
	I	Arithmetic	Physical Training	Recreation	Geog. or Hist. and English	Geog. or Hist. and English	Needlework (Girls) Gardening (Boys) Drawing and English	Recreation	English and Drawing	Prayers and Dismissal
	II	Arithmetic	Physical Training			Geog. or Hist. and English	Drawing and English		English	
	III	English and Arith.	Physical Training			English	Drawing and English		Geog. and Hist. and Modeling	
	I	Arithmetic	Physical Training	Recreation	English	English	Needlework (Girls) Mapping and English	Recreation	Geog. and Hist. and English	Prayers and Dismissal
	II	Arithmetic	Physical Training			English	Needlework (Girls) Mapping and English		Drawing and English	
	III	English and Arith.	Physical Training			English	Needlework (Girls) Mapping and English		Nature and English	
	I	Arithmetic	Physical Training	Recreation	Hist. or Geog. and English	Hist. or Geog. and English	Needlework (Girls) Gardening (Boys) Practical Arithmetic	Recreation	English	Prayers and Dismissal
	II	Arithmetic	Physical Training			Hist. or Geog. and English	Needlework (Girls) Gardening (Boys) Practical Arithmetic		Nature and English	
	III	English and Arith.	Physical Training			English	Needlework (Girls) Gardening (Boys) Practical Arithmetic		Hist. or Geog. and Modeling	
	I	Arithmetic	Singing	Recreation	English	English	Drawing and English	Recreation	English and Organized Games or Optional	Prayers and Dismissal
	II	Arithmetic	Singing			English	Drawing and English		English and Organized Games or Optional	
	III	Singing and Arith.	English			English	Geog. and Hist. and English		English and Organized Games or Optional	

	9.00 to 9.15	9.15-9.50	9.50-10.20	10.20 to 10.30	10.30-11.15	11.15-12.00	2.00-2.40	2.40-3.20	3.20 to 3.30	4.25 to 4.30
MONDAY	1A	Scripture	Boys: English Girls: Domestic subjects	Recreation	Boys: Music Girls: Domestic subjects	Mathematics	English	History	English	English
	5A	English	English Physical Exercises		English	Geography	Mathematics	Mathematics	English	Science
TUESDAY	1A	Mathematics	Mathematics Physical Exercises	Recreation	Music	English	Boys: Science Girls: Needle-work	Physical Exercises	Geography	Geography
	5A	Scripture	English		Mathematics	English	Boys: English Girls: Needle-work	Mathematics	English	English
WEDNESDAY	1A	Scripture	English	Recreation	Drawing	Drawing	English	History	English	English
	5A	English	English		Mathematics	History	Drawing	Drawing	Physical Exercises	Musical
THURSDAY	1A	English	English	Recreation	Mathematics	English	Boys: Mathematics Girls: Needle-work	Physical Exercises	Geography	Geography
	5A	Scripture	English		Mathematics	English	Boys: Physical Exercises Girls: Needle-work	Mathematics	Mathematics	Geography
FRIDAY	1A	Mathematics	Mathematics	Recreation	English	Geography	Boys: Manual Training Girls: Geography	Mathematics	English	English
	5A	English	Physical Exercises		Mathematics	History	Mathematics	Mathematics	English	English

of five distinct standards, numbered I to V in the time schedule. It will be noted that the syllabus in this school is lacking in practical work, though this aspect of education is, no doubt, supplied in part by the farm life. In another of the same group of schools the children learn to spin wool from the fleece, to dye and knit it into garments for their own wear. The nature of the "intelligence tests" mentioned in the time schedule is obscure; they are probably inspired by articles in the educational journals. The school is a "voluntary" school, the building being the property of the Church of England. The religious teaching includes instruction in the Church catechism.

(B) This is a typical village in an eastern agricultural district. It has about 110 pupils under a headmaster and three women assistants, of whom one is placed in charge of the infants, — children under 7 years of age. The time schedule is intended to leave wide freedom to the teacher and to allow individual children to progress at their own rate. Thus under "English" the teacher divides her time as is required between reading, composition, speech, etc., keeping careful records of the work done by individual children in each branch. "Gardening" includes keeping weather records and exchanging and comparing results with those obtained by four schools in other parts of England. Every boy and every girl attends a neighboring center for carpentry or housewifery for half a day a week. The school belongs to the Church of England. The time schedule gives the work only of the three senior classes.

(C) This is a senior mixed school provided by the London County Council. There are about 550 children above the age of 11, classified in 12 classes, under a headmaster and 12 assistant teachers, men and women. The manual training and domestic work are taken under additional teachers in centers used also by a junior mixed school

and a selective central school. The time schedule shows the work taken by one of the highest and by one of the lowest classes.

TEACHER PREPARATION AND THE CURRICULUM

According to the *Code* the head of an elementary school must be a certificated teacher, and the assistants must be certificated teachers, uncertificated teachers, student teachers, or supplementary teachers. A certificated teacher is one who has either graduated from a training college intended for the training of elementary school teachers, or who has passed the Board's Certificate Examination, or has qualifications, academic and professional, accepted as equivalent thereto, for instance, a university degree *plus* a teaching diploma. An uncertificated teacher is one who has passed a recognized examination, generally of lower grade, which does not test professional as distinguished from academic knowledge. A student teacher is a young person over 17 years of age who has passed an examination qualifying for admission to a training college, and spends a year or more in the paid service of a local authority on his way thither, learning the rudiments of his craft and also continuing his studies at school on one day a week. Supplementary teachers are "suitable women over 18 years of age who are specially approved by the inspector for their capacity in teaching," but are not required to possess any specified academic qualifications. Certificated and uncertificated teachers enjoy their status subject to good conduct throughout their professional life; the recognition of a supplementary teacher is subject to yearly reconsideration and holds good for the school in which she is actually serving. In considering sufficiency of a school staff, the Board equates the head teacher to 35 pupils, a certificated teacher to 60, an uncertificated teacher to 35, and a student teacher or a supple-

mentary teacher to 20; but supplementary teachers may teach only infants or the lowest class in a rural school.

A teacher certificated since 1910 cannot become a head teacher unless he has been trained, and since the Board's examination for the certificate is shortly to be discontinued, certification will in time imply training as a matter of course. At present, however, only about 79 per cent of the certificated men and about 67 per cent of the certificated women have passed through a training course. London has practically eliminated all but certificated teachers; but in the country as a whole 19.5 per cent of the teachers are uncertificated (mainly women) and 7 per cent are supplementary teachers. In the school referred to above as *B* the headmaster is trained and certificated, while of his assistants, all women, two are uncertificated and one is a supplementary teacher. This staffing is typical of a village school in the poorer area.

A student who aims at the Elementary School Teacher's Certificate may take, with assistance from public funds, a three-year degree course at a University, followed by a year of professional training; but the majority pass through a two-year training college, where they take a course of lower standard, partly academic and partly professional. The Board's *Regulations for Two-Year Colleges* give, therefore, the best picture of the arrangements for equipping students for the elementary branch of the teaching profession. They permit of courses specialized for students who wish to prepare for (a) teaching pupils over 11, or (b) for general teaching work with scholars up to the age of 14, or (c) for teaching infants and children of the junior stage. The first course has in view the "advanced instruction" spoken of earlier and the work of central schools; the other two courses have reference to the work of the ordinary elementary school as it has in the past been and still is carried on.

In addition to practice teaching the curriculum includes, on the professional side, instruction in the principles of education, hygiene, physical training, and voice training, together with drawing and handwork so far as these are required for the illustration of lessons. The rest of the subjects are divided into two groups. Group *A* consists of the subjects taught in the elementary schools together with French and some special sciences; and the courses may, in most instances, be either "ordinary" or "advanced." Group *B* contains the practical subjects, music, drawing, handicrafts, gardening, etc., which again may, in most cases, be taken either at the "ordinary" or at the "advanced" standard. Students are allowed considerable freedom in selecting their curricula from the two groups. A student preparing to teach pupils over 11 must take English and at least another course from Group *A*, one being of advanced standard; he must also select one subject from Group *B*, and may complete his program by adding one other subject from either of the groups. Other students must take five subjects, including English and one other from Group *A* and two subjects from Group *B*, but are not required to carry any subject to the advanced standard.

It will be seen that the official regulations keep the training-college curriculum in very close relations with the curriculum of the elementary school, and they encourage a moderate amount of specialization, particularly for those who intend to teach the older scholars. It must, however, be added that the whole system has recently been subjected to a good deal of criticism. For instance, an important minority of the Departmental Committee on the Training of Teachers for Public Elementary Schools reported (1925) in favor of converting the two-year colleges into purely professional schools giving a one-year course. The minority would assume, in short, that the cultural education of the intending

teacher should be completed, in a secondary school or a university, before he commits himself to teaching, and that the training college should aim merely at enabling him to make proper professional use of his acquirements. The majority of the Committee declined this drastic view. They held that a two-year course is essential to foster a "sense of vocation," and to fit the students for wider duties of their calling by giving time for reflection, by developing and instructing their interests in social service, and by enabling them, as members of an adult community, to reach a degree of maturity and social culture important for the teacher but not attainable in a secondary school. On the other hand, the majority recognized that the training colleges suffer at present from a certain division of aim, and agreed with the minority that the curriculum should be more definitely professional in character. To that end they suggested that students should continue, as a rule, only one subject for the sake of developing further "the habit of study," and that the treatment of the other subjects should take the form of a review of their secondary school studies, intended to deepen and quicken their appreciation of main principles and to enable them to revalue their knowledge with explicit reference to the problems of teaching.

This debate about the training-college curriculum is complicated by a subsidiary but most important issue, namely, whether the colleges should continue to depend directly on the Board of Education or whether they should be affiliated with the universities. The Departmental Committee dismissed as impracticable the idea advocated by the National Union of Teachers that all elementary school teachers should prepare for the university degrees, but reported in favor of the general policy of bringing the universities and colleges into some form of connection. The Board's announcement that they will cease after 1928 to examine the

training colleges has turned what has for some years been an academic debate into a question of urgent practical politics and the universities are now actively considering with the training colleges and the central and local authorities in what way they can best perform a novel and difficult duty which events have thrust on them. Their decisions cannot yet be foreseen, but will obviously have an important bearing on the future development of the training colleges. Will the influence of the universities encourage or resist the present tendency towards a greater professionalization of the curriculum? Will it further or oppose the present tendency to differentiate courses of training of teachers of older and younger children, of urban or rural schools? In particular, can universities usefully supervise the training of infants' teachers, or must this branch of the work be referred to another authority? Will it be possible for the training colleges (and they are very numerous) which belong to religious bodies to accept a large measure of university interference? These are among the questions which the action of the Board has precipitated, and which are now being anxiously discussed.

THE SCHOOL SYLLABUS

In most schools the courses in secular subjects are drawn up by the head teacher. His program must, of course, conform with the *Code* and is subject to the criticism of the inspectors of the local authority and of the Board; but he may generally indulge his initiative within wide limits. Where, as in the better staffed urban schools, the teaching of a subject in several classes is intrusted to a specially qualified teacher, the head may delegate the task to the experts, and in some cases the programs adopted represent the result of corporate deliberation among the staff; but the rule that the head teacher is responsible still obtains. In recent years

that responsibility has tended even to increase; for in cities where instruction in handwork and domestic arts and science is given in "centers" serving a group of schools the teachers of those subjects are now often placed under the authority of the head teachers to the extent that they must bring their courses into relation with the general curriculum of the schools. The movement towards a better-integrated curriculum is likely to be helped by the gradual supersession of the "centers" by practical workrooms within each school building.

CRITICISM OF THE CURRICULUM

The educational budget, which grew steadily from the passing of the first great Act of 1870, has increased with multiplied rapidity since the War, mainly by reason of a striking rise in teachers' salaries. It is natural, therefore, that the question whether the nation obtains good value for its expenditure upon education should be insistently raised. In part the critics of the elementary school are impenitent believers in the doctrine that it should confine itself as closely as possible to the "three R's." There are, however, many who have accepted with sincerity the wider view of the school's functions but are seriously concerned about its efficiency. They think there is good evidence that the performances of school-leavers are meager and disappointing, and are led to ascribe poor results in arithmetic, scanty knowledge of geographical facts, and inability to write simple English to a too ambitious program which makes thoroughness impossible. They are forced into at least partial agreement with those who object to a liberal education for the people on principle or because they set no value upon culture. And we have already seen that the educational authorities are themselves of opinion that the customary curriculum is too bookish, and are urging that practical subjects shall

take a larger place in the instruction of those pupils whose superior ability does not carry them at all into the secondary or selective central schools.

But although attacks upon the modern tendency in popular education have, in recent years, been virulent and have gained powerful press support, the general attitude is one of acceptance and insistence on further progress. As was remarked in the *Educational Yearbook, 1924*, this fact was brought out strikingly in the last parliamentary election, when all three of the great parties gave education a leading place in their platform and promised practically the same programs. In spite of the serious controversies in the field of finance there is, indeed, good reason for the optimistic view that education in England has at last escaped from its entanglement with party politics and that continuity in progress may be expected.

EDUCATIONAL PSYCHOLOGY AND THE CURRICULUM

Little need be added to what was said in the *Educational Yearbook, 1924*, about the influence of modern psychology on elementary education; for curriculum and methods have responded together to new ideas. In the *Code* and in the *Suggestions* there is no explicit appeal to psychology nor have many studies been made in the psychology of individual subjects; but an attentive reader will see that the recommendations as regards curriculum are made with conscious reference to modern doctrines of mental development. And in the demand for the reorganization of education after the age of 11, which is the most significant thing in the field of English education, there is clear evidence that educators appreciate the psychological differentiation between the child and the adolescent and seek to reform the existing and to create new institutions in accordance with it.

EXPERIMENTS IN CURRICULUM MAKING

It has already been observed that official prescriptions leave to the head teacher of an elementary school much room for initiative and indeed for adventure. Accordingly the curricula in use even in a single large area often show surprisingly wide variations from the conventional mean. In this sense there is a great deal of interesting experimenting in the framing of curricula. On the other hand, there is not much that can be called experiment in the strict sense of the term, which implies that a definitely formulated hypothesis is tested, in a disinterested spirit, with the help of quantitative or quasi-quantitative assessments of results.

Using the term in a looser sense, one may say that most experiments are in the application of the idea of "individual work"; but these concern method rather than curriculum, unless they take so bold a form that the distinction becomes meaningless. This is the case, for instance, in a school on the outskirts of Manchester, where the regular time schedule is reduced to a minimum and the occupations of the pupils are so highly individualized that it would be difficult to formulate the school's curriculum. Much the same could be said of the experiment in "physiological education" conducted until recently in an elementary school near Halifax. In this school the children made their own classroom furniture, and a good idea of the instruction centered round informal occupational work in the garden, the keeping of pets, etc.

The boarding school for the children of working people, known as the Caldecott Community, though not a public elementary school, may be regarded as an important experiment in making a curriculum suitable for the elementary stage and for the type of pupils who normally attend the public schools. Outdoor occupations of a more serious

character than are usual are combined with book studies conducted largely on the principle of individual work. Music and art have an important place in the program, and the general aim is to foster a high type of character by enabling the children to live the life of a liberal, cultivated, but simple home. The patient empirical spirit in which the directors have conducted this enterprise, and the careful studies they have made of its results and development, entitle it, more than most, to be called an experiment in the proper sense.

Less radical in conception are the attempts, now some years old, to work out a suitable curriculum for the open-air schools that have been established, especially in London, for certain types of delicate children; the experiment in a London dockside school where the boys' studies have a definite nautical flavor and the course includes some instruction on shipboard; and the successful effort made in a slum school in western London to raise the intellectual and moral level of a particularly difficult type of pupil by means of an unusually wide and intensive practical curriculum based upon an exceptionally full equipment. When the War broke out, there was in the East End of London a craft school conducted on still bolder lines and attended by children who, for other subjects, were pupils of neighboring schools. Pottery, leadwork, and other æsthetic crafts formed the staple of its teaching. This interesting experiment in a practical curriculum has not been resumed since its interruption in 1914. But in many ordinary elementary schools in London and elsewhere there have been and are still in progress attempts of an experimental character to combine the teaching of science and handwork and of handwork and art, their significance being that they have involved wide departures from the customary curricula in these subjects. "Local surveys," inspired in some cases by Patrick Geddes and the sociologists of the school of Le Play, have been car-

ried out with interesting results by a few enthusiastic teachers; while the programs of many elementary-school journeys have been planned in such a way as to be very useful experimental contributions to the problem of making school studies more practical in their outlook.

Music is a subject that has tended in recent years to acquire an important place in the elementary school curriculum. Several of the county authorities have appointed musical advisers, and some have encouraged their schools to compete in county festivals which are doing most valuable work in raising the general level of musical taste and interest. In some of the larger cities radio-concerts, planned especially for children, have an occasional place in the school time schedule. The schools are also playing an increasingly large part in the revival of the old English folk dances which has begun to make rapid progress throughout the country.

In some schools, notably in the large rural county of Gloucestershire, the curriculum has been experimentally modified to admit of the adoption of the methods of individual study advocated by the late Miss Charlotte Mason, founder of the Parents' National Educational Union.

Lastly, mention should be made of the growing movement to give an agricultural bias or color to the elementary curriculum in country schools. The organization of well-equipped central schools, attended by the older pupils from a group of villages, has an important place in this movement. In these, as well as in many ordinary village schools and schools in country towns, interesting courses in handwork, practical mathematics, gardening, bee study, stock study, dairying, and other relevant subjects are being tried out. The problem of education in rural communities is, however, one to which attention has only recently been directed in England.

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THE PROBLEM OF THE ELEMENTARY
SCHOOL CURRICULUM, GERMANY

BY

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THE ELEMENTARY SCHOOL CURRICULUM IN GERMANY

INTRODUCTION

The pre-War curriculum. — When the schools began to be reorganized under the influence of the Revolution of 1918, the pre-War courses of study found little favor with the teachers. Friends of the new constitution saw in the different state courses of study which in many cases had reached the venerable age of forty years, and still more in the local prescriptions of local directors, the effects of state autocracy and bureaucracy. The aims of the state then were the training of loyal subjects whose chief virtues were to be meticulous orderliness, blind obedience, and ready acceptance of uniformity. The "standard courses of study" were intended to develop the average citizen who would never think of applying his own independent standards to any measure thought desirable by the supreme, divinely imposed authority. The struggle against the inherited time schedules and courses of study was thus raised to the higher level of a struggle for democracy and particularly for the emancipation of the spirit.

The personality both of teachers and pupils suffered under the old course of study, which was too often only a measure for pedantic supervision, which in many ways merely looked upon the elementary school as an institution to prepare for the secondary school, and whose content disregarded individual capacities. The supervising inspector too often rated as excellent the teacher who, following the standardized scheme,

crammed the most material into his pupils, even though he punished and tortured the children, embittered the days of their childhood, left their spiritual longings unsatisfied, and injured their health.

The chief point of criticism was that the curriculum which attempted to turn the child into a miniature encyclopedia was handed down from above. This was a consequence of the unexpected expansion, increase, and differentiation of knowledge in the last few decades, which resulted in a corresponding increase of subjects, lesson periods, and content in the elementary schools. Omniscience was regarded as education and "knowledge is power" became the catchword. The teachers were opposed to this ideal of a scientific, materialistic age; thorough devotion to one field of work, they felt, to the neglect of so much that is customary, is more productive than outlines, surveys, words, names, numbers, and so on without any mastery of the content, without any idea of their relationships, without any personal effort in the acquisition. The education of an individual is not determined by the amount of detailed knowledge acquired through a collection of subjects that make up a course of study handed down from above. Far more important are the sound and self-conscious development of the child's real being, the training to the recognition of problems and the discovery of methods of solution, and the cultivation of the desire for further education. The useful individual is not the one who is educated, but the one who is educating himself. The intellectual one-sidedness of the old school predominated at the expense of the training of the body, the senses, the imagination, the spirit, and the will. In its devotion to knowledge and a well-rounded system it tended to neglect not only the child but the realities and the needs of life. The teacher is condemned to be an artisan with his chief effort devoted to the maintenance

of uniformity and identical standards of work as far as possible throughout the whole country.

COURSES OF STUDY AND TIME SCHEDULES

Hence has resulted the demand for the abolition of prescribed courses of study and time schedules, and for complete emancipation for teachers and pupils. This is a natural reaction against the restrictions and fettering of personality under the old system. The demand was most vociferous in Hamburg among the advocates of the community schools, or, as they are sometimes called, the schools of production, which were planned as societies in which the young, following their own laws of development, would grow gradually into producers for society.¹ In the period of creative progress immediately following the revolution the educational authorities in Hamburg granted a number of voluntary groups complete "freedom from a prescribed course of study and defined aims of instruction." As long as the parents supported schools along these lines, nothing was to be done to limit the experiment.

Elsewhere throughout Germany an educational subjectivism became active, filled with enthusiasm for such ideas as these :

A course of study must define its aim in terms of an average individual in an average situation. The time and method of work is in every case determined by this aim. If, however, the foundation is to be laid and time is to be gained for genuinely personal work in the sense of the school of activity (*Arbeitsschule*), then every course of study must be abandoned as restrictive. . . . No reform of the spirit of the school is possible without emancipation from the traditional methods and theories of education. Our aim of education is entirely undetermined so far as

¹ See *Educational Yearbook*, 1924, pp. 530 ff.

material is concerned, the scope of education is unlimited, and education itself a never-ending process which is based on the theory that educative material that knows no limits furnishes a problem that knows no end.¹

The Hamburg board of education now wishes to place restrictions on the community schools, but the school mentioned above continues to enjoy absolute freedom for experimentation and still has the parents solidly behind the teachers. The other experimental schools in Germany are directing their efforts to the usual objectives of the fourth and fifth school years and in the meantime ask nothing more than a relaxing of the general regulations and above all freedom in methods of instruction.

Public opinion no longer tolerated the completely independent efforts of the all too "resolute" (*entschiedene*) reformers. Complaints were heard far and wide of a deterioration in the work of the elementary schools without taking sufficiently into consideration the difficulties and hardships of the War and post-War period.²

The reform movement with its idealistic origins undoubtedly contained valuable elements for the progress of education and even in the failure of the "planless" experiments there is something gained. But the exaggerated, uncontrolled activity of the reformers cannot possibly be accepted as a universal principle. While it is true that the development of a creative, truth-seeking, socially responsible individual is not bound by prescribed information, prescribed standards, and prescribed subject matter, still the state and society for their self-preservation and for the sake of the child and the parents must impose certain limits. So

¹ *Denkschrift der Hamburger Schule am Berliner Tor*, 1922.

² See *Die sächsische Volksschule. Denkschrift des Ministeriums für Volksbildung*, 1924, and *Der Kampf um die Volksschule. Gegenschrift des Sächsischen Lehrervereins*, 1925.

long as there is compulsory education, and the common school is considered desirable to develop as far as possible unity of sentiment and culture among the people, so long as the child has to be made a worthy member of the social and economic organization as it is, and teachers are not by nature educators ready for the highest self-sacrifice, just so long are courses of study indispensable. Incidental instruction starting from the child alone does not arouse and develop all the powers and capacities dormant in the child; only too often would everything be determined by the teacher whose character, whether good or bad, would leave its mark on the class. To give up objective standards both in curriculum making and in methods of instruction would be to surrender the scientific character of education.

The "pathos of suffering" (Lamprecht) has to-day in almost every instance yielded to common sense. Statements are again heard to the effect that all subject matter gains in value from its external relations to science and life, and that spiritual strength is indissolubly connected with content and power with knowledge. Indeed, there is at present a demand for courses of study in order to win parents and through them the whole of society and also the backward, hesitant teachers for the sound and well-founded development of the school of activity.

FEDERAL REGULATIONS

The course of study depends upon the aim of education, which is formulated on the basis of the educational philosophy of the day in conjunction with contemporary social tendencies. A good example of this is found in the statement incorporated in the Federal Constitution (Article 148): "In all schools moral training, civic responsibility, and personal and vocational efficiency must be the aims in the spirit of German nationalism and international reconciliation."

Other constitutional provisions which affect the formulation of courses of study are found in the following: Civics and instruction through activity are school subjects. Religious instruction is a regular subject except in secular schools. It is given in accordance with the principles of the religious denomination concerned without affecting the supervisory right of the state.

For the rest the Federal Government has not so far encroached on the autonomy of the states after establishing the foundation school (*Grundschule*) by law in 1920. The Federal Ministry of the Interior published *Suggestions* for the organization of this school on July 18, 1921; these are intended to serve as a general guide for the separate regulations in the individual states and their subdivisions. The *Suggestions* reflect so admirably contemporary educational ideas that they are here reproduced verbatim:

1. The foundation school common for all children is not a special type. It is rather a part of the elementary school and includes the first four years of the course, which serve at the same time as the foundation for intermediate and secondary education.

2. These first four school years have an aim of their own and an integrated field of activity. Their aim is the gradual development of the powers of the child starting with the instinct for play and movement and leading to moral activity which finds its scope in the school society. The integrated field of activity is based on the expanding and creative appreciation of the material and spiritual environment by the child with special reference to the cultivation of childish expression and systematic training of eye and hand through independent activity and the observation of nature, industry, and workshops. At the same time physical education must be promoted especially through games, gymnastics, excursions, and, according to the season of the year, bathing, rowing, skating, and other physical activities.

3. This aim of the foundation school also demands the conscious introduction of the mother tongue with its treasures of children's prose and poetry, and consequently reading, writing, and singing; further it includes the comprehension of space, rhythm, and numbers which is to be obtained through active occupation with things and through drawing, modeling, and cutting-out in the case of spatial relations.

4. The result is, then, an integrated instruction as a foundation which gradually branches out into information about the environment with practice in expression and manual work, language, arithmetic, singing, drawing, gymnastics.

5. With this aim, based on the development of the child and the reconciliation between it and the demands of culture, the foundation school by its nature serves as the foundation for every type of further education, including secondary education, without being burdened with the task alien to it of being a preparatory school for instruction in foreign languages.

In these *Suggestions* may be recognized all the principles which should fill the new types of schools with a new spirit, especially those principles that refer to the local environment, social living, the development of power, and self-activity. In them is found expressed, though naturally indirectly, ideas that have crystallized out of a decade of criticism of the courses of study: Away with adult standards for children! Away from purely memorized work to creative power! Away from the domination of logically organized subjects to the domination of psychology! Away from subject departments to integration of subjects! Away with all kinds of encyclopedism to thorough, active appreciation of the environment! Away from the petty schoolmasterish methods to freely unfolding personality of educators! Although there is yet no generally accepted theory of curriculum making, since the whole science of edu-

cation is in process of change and reform, no educator can ignore the fundamental ideas that have been mentioned. He will not ignore the logical content basis but he must in future give the first place to psychology. This is shown in all the regulations that have been issued officially since 1919.

STATE REGULATIONS

Prussia. — The *Regulations* of 1872 have been replaced by the *Suggestions for Making Courses of Study*, issued on March 16, 1921, for the foundation schools, and on October 15, 1922, for the last four years of the elementary school. From these it is obvious that detailed plans of universal applicability have disappeared. Considering the extent and varied character of the provinces and the local needs, such a procedure would be an outrage. The Ministry of Science, Art, and Popular Education felt justified and obliged to give stimulus and guidance to the teachers who were to prepare the courses for the district, community, or school. It took occasion to present a survey of what had been recognized as sound and worth while in recent years in the field of theory, and of what had been accomplished by pioneers in the teaching body in response to the demands of the time and of science. Men with practical experience who now hold positions of responsibility in the Government exercised a pronounced influence on the *Suggestions*, a guarantee that the most important principles of scientific pedagogy are respected while safeguards are set up against the aggressive band that despises all tradition.

The division of the elementary course into the foundation school and the last four years must not lead to the impression that there is a definite break between the two in the course of study or that the foundation school undertakes any special preparation to meet the needs of the secondary schools with which it is articulated. Both sections are formed in

the same spirit and in the same mold. If in place of the old division into three sections — lower, middle, and upper — a twofold division has been adopted, these stages represent merely a legal situation and not the educative process, which knows nothing of stages, but develops and advances slowly like a gently rising mountain path.

Bavaria. — The preparation of a course of study is still under way. The Bavarian Teachers' Association has attempted to bring some influence to bear on it through two memoranda. The Ministry has given much attention to its suggestions and promises to present the plan on its completion to representatives of the teaching profession. The courses of study now used in the eight districts and in Munich belong to the pre-War period and have only been modified in certain points to bring them up to date.

Saxony. — In the course of study which is now being prepared the Ministry aims to reconcile the bitter conflict between the principles of power-development and of content and to secure more uniformity again in the schools. The course of 1878 is no longer followed anywhere. Many cities and districts have adopted transitional plans partly through the initiative of the teachers and their associations, partly under the guidance of the school inspector. The new laws give no other details than the compulsory and optional subjects of instruction in the common elementary school. The conference of district school inspectors has already made concrete proposals, and the Saxon Teachers' Association recognizes the need of a comprehensive regulation in the following resolution passed at the meeting of delegates in 1925:

A state course of study must grow out of the work of the school. The new course of study for Saxony should, therefore, make available the extensive preliminary work done by the teachers of the country and by various school

districts. The meeting of delegates expresses the hope that the state course of study will be prepared on the broadest lines with the coöperation of autonomous organizations like the delegates of the Saxon Teachers' Association. . . . Only the general framework of a course of study should be issued. The elementary school must not become merely a preparatory school for the secondary school. . . . Methods of instruction and education cannot be made the subjects of regulations. The state course of study must assure the reorganization of the school into the school of activity.

Württemberg. — The foundation school was placed on a new basis in 1921-22, the fifth to the eighth school years in 1925. The courses of study show their modern bent in stimulating experiments in permitting various combinations of the pupils in small schools, and in allowing selections from the rich wealth of material that is proposed.

It is of less importance to devote attention to the amount of knowledge to be acquired than to the promotion of natural development, training, and education of the pupil in the direction suggested for each subject in the statement of its aim.

On the other hand, the number of hints on methods, the requirement of weekly reports on the work covered, and other similar items arouse a suspicion that many of those in authority are not wholly averse to exercising extensive control over the teachers.

Baden. — In 1921 the State Teachers' Association prepared a memorandum through its committee on education. The Government in 1924 issued a small pamphlet of only seventeen pages, defining the minimum number of lesson periods for each class, and giving a broad statement of aim for the prescribed subjects; little space is given to the distribution of subject matter by school years, so that adequate

scope is allowed for the development of local plans. The only exception that is made here as everywhere else is in religious instruction, which is subject to the control of the religious authorities, with the result that every saying, every hymn, to be indelibly stamped in the memories and reproduced at the examinations, is carefully prescribed.

In Thuringia the problem of the course of study was settled on progressive lines in 1923. In Hamburg the course for the foundation school is ready; that for the second half of the elementary school is still being prepared. The situation is similar in all the smaller states.

SOME CRUCIAL CURRICULAR PROBLEMS

Education and the environment (*Heimatkunde*). — To combat the practice of splitting up the curriculum into separate subjects, to give a smattering in numberless fields without thoroughness in any one, all the recent courses of study attempt to make the inexhaustible home environment of the child the center of instruction. They not only permit but require the schools to draft, at least for the first four years, special courses based entirely on the local environment. In this way the colorless platitudes of abstract book-knowledge are banished from the school, and the child does not feel that his work is completely divorced from his everyday life, but realizes how it helps to explain and clarify its meaning. In his preparation the teacher has the responsible duty of studying the environment of a number of localities and of collecting materials for the myths, local history, and geology of the locality in which he is teaching.

In the lower stages are treated local peculiarities and local activities. In Prussia emphasis is laid on the necessity also of giving due attention to local dialects; in the upper stages there begins the systematic introduction into the varied cultural activities of the world. Again and again

are heard the recommendations to resort to the centers of industry and social intercourse, to observe animals, plants, and the settlements of the locality, to teach in the open. *Heimatkunde* (study of the home environment) is not intended to be a subject in the lower grades but a principle to be followed in all instruction, requiring constant adjustment of every subject to the experience of the child. Activity is then placed in the foreground because it accords with the psychological needs of the child and affords points of connection in every direction. At the same time the child obtains a conspectus of the industrial organization into which he will enter after leaving school, an insight into all types of activity, methods of work, and conditions underlying them, a knowledge of the difficulties as well as the joys that flow from civilization, and, finally, an appreciation of the value of work for the individual and for society.

From the locality the next step is to the fatherland and the culture that is its peculiar possession. This principle is inherent in the educational reforms of nearly all European countries, and it is no accident that in 1925 the thesis of the German Teachers' Association was "German cultural possessions must furnish the basis for our schools." The principle of German culture in popular form will have far-reaching effect in the courses of study for the mother-tongue, geography, history, and nature study.

The School of Activity (*Arbeitsschule*). — The *Arbeitsplan für die Grundschule* (*Plan for the Conduct of the Foundation School*) issued in Hamburg in 1922 contains the following statement of principles:

The capacities and powers of the child, which have unfolded themselves through play in the preschool period, are to be developed in such a way that the instinct for activity arises out of and by the side of the play instinct.

Out of this should come the moral will to engage in those activities that the school society requires. . . . Hand and eye are to be trained systematically through creative and manual activities. Everything that the children learn must be experienced personally and acquired through personal activity. The natural impulses in the child to be creative and to give expression to what has been experienced must be respected above all.

The tendency is the same in practically all the state courses. The Prussian plan suggests as opportunities for manual activity in the upper grades the preparation of sketches, drawings, equipment, and apparatus (particularly for geometry, geography, and nature study), making collections and experiments, looking after animals in aquariums, terrariums, and insectariums, flowers and school gardening, manual instruction, needlework and domestic arts. Observation, experimentation, reaching conclusions, research, and independent reading are mentioned as types of free intellectual activity.

Most of the courses close with extensive bibliographies and give the teacher in search of them the best and latest sources by which he can enrich the work both of himself and of his pupils.¹

Integrated instruction (*Gesamtunterricht*). — Integrated instruction implies a coördination and interconnection of everything that comes up for instruction. The old school destroyed the unity of cultural growth and of life; their inexhaustible wealth, power, and greatness were forced into a scheme which, though simple and smooth, corresponded neither to the course of actual experience nor to the unity of all psychological experience. A favorite example, taken from a teacher's report, is the following :

¹See further on the School of Activity the *Educational Yearbook*, 1924, pp. 513 ff.

- 1st Period. The Sermon on the Mount (Palestine)
- 2d Period. *Der Snger* (a poem of Goethe, taking the pupils back to Germany in the twelfth century)
- 3d Period. Separation of the Netherlands from Germany
- 4th Period. Coffee (Brazil)
- 5th Period. Percentage (Arithmetic)

Thus the most varied subjects, without any relation between each other and without any introduction, knock at the door of the child's soul and demand admission. Steady, independent acquisition of mastery in any field is impossible; the clang of the school bell shatters valuable attitudes. The subject specialist may drill in a mass of information, but because it is unrelated it remains dead ballast. To-day, because the school has definitely surrendered any attempt at logical completeness, pure division into subjects in the lower grades is nonsense. Such subject departmentalization was responsible for the wearisome efforts to teach reading and arithmetic prematurely, and made subjects ends in themselves; the course of study was crammed without regard for the intellectual capacities of the pupils, and decried as educational materialism any attempt to derive the materials of instruction from natural situations without overburdening the child.

The Prussian course of study recommends integrated instruction, that is, unforced change of activity according as the needs of the individual or the situation demand, in the first school year. This is not required universally in order to avoid the imposition of useless compulsion on the older teachers who are still devoted to the old "subject" conception of education. Permission is granted to those who wish to continue integrated instruction in the second year and beyond, either through local courses or as it follows from the work that has already been done. Hamburg, Saxony,

and Thuringia have similar regulations, aiming to avoid the separation and disintegration by subjects in the foundation school. Hesse aims to use as the core of instruction in the foundation school knowledge of environment and of life (*Heimat- und Lebenskunde*) in which the local, natural, historical, moral, social, and other elements are bound together as a unity; arithmetic, singing, and other subjects are to grow out of this as far as possible. Another essential condition is to abandon the traditional system of specialist teachers and the frequent change of classes. The same regulation is found everywhere practically as is found in Thuringia:

The adoption of integrated instruction requires that the pupils, at least in the first two years, be taught by the same teacher, while efforts should be made to place instruction in the third and fourth years in the hands of the same teacher. Where several teachers must be employed in the same class, close coöperation between them is of particular importance.

A common experience, such as a class excursion, a common task, as in school gardening, or an extraordinary event in world history constitutes the central point for instruction. There must, of course, be a natural change from objective perception, intellectual acquisition, and physical expression, but such changes as these are no longer mechanically determined in advance to the very minute. Oral and written, graphic and plastic expression grow naturally out of experiences; with them are associated the study of pictures, stories, fairy tales, songs, and poems. From these situations, when they demand it, are also derived the material for practice in speaking, composition, spelling, and arithmetic. From the wealth of experience and life the threads are so spun that the relationships are not lost and the pupil retains a conspectus over the whole course of instruction. Religious

instruction alone can with difficulty be made a part of integrated instruction because many parents would not understand such incorporation and would withdraw their children from it.

Integrated instruction undoubtedly imposes the severest demands on the teacher in the matter of preparation and command of method. A point that is frequently emphasized in the courses of study is that adequate ability in the technical arts is essential. Further, since an observer may get the impression that integrated instruction does not go deeply into any subject and at times neglects important points, the teacher must in advance and constantly have a picture in his mind of the work of the whole year and must not permit himself to be misled by his hobbies so far as to remain on a single track with his pupils.

Departmentalization of subject matter is everywhere retained for the upper grades, but in German at least the subdivisions into reading, writing, language, spelling, and composition have been generally suppressed. There is no desire to make integrated instruction a burden for the more mature pupils who are ready to recognize the educational value of a subject and to understand the fundamental purpose of the divisions in the program. For them essential materials that lie outside of their environment should not be dragged in as incidentals, particularly since not everything that is near in time and space is now psychologically near to them; on the contrary, interest in the remote predominates. It is still essential that the teacher should give attention, coöperating where necessary with specialist teachers of his class, to adopting central points for instruction, such as man's work in civilization, or how human needs are met. From this there emerge such points of concentration as food, shelter, clothing, commerce and communication, science, and art.

The teachers are seriously asking that a few free periods be left each week to be disposed of at their option for well-planned needs. These might be used for drill and practice, or for the development of special abilities among gifted pupils, or for group activities, or for more direct personal relations with the pupils through music, dramatization, or social and corporate living together.

Freedom of the teacher. — The School Maintenance Law of Saxony passed in 1922 makes the following provision in Section 28 :

Teachers must be allowed the necessary freedom in the conduct of instruction to lead to successful results in teaching and education. The courses of study, which will be introduced for individual schools or for school districts with the approval of the district inspector, must comply with the regulations that are to be issued for the whole state.

This means the death warrant for the standardized course of study that must be followed everywhere in the state. The teacher is no longer compelled to perform automatically week by week and period by period what is prescribed from the office of his superior. He may do what the situation at any moment demands ; he may add a personal touch to the course of study of his school ; he may rearrange and expand wherever justifiable reasons present themselves.

A similar regulation in Thuringia provides that "local and district courses of study must not prevent the teacher selecting and arranging materials and exercises in accordance with his own judgment as to the special needs of his class." Württemberg provides that :

the independence of the teacher shall not be restricted any more than is absolutely necessary ; in fact he should be given the widest scope to discover suitable content material and to test varied types of activity even though they depart from the norm.

Most states no longer demand weekly but quarterly reports of the work covered by the teachers in their classes. On the basis of these the school prepares a general report for the district school inspector. If they are justified, it is not expected that this official will raise objections against deviations from the course of study; he will be satisfied in his classroom visits if a maximum of success is secured with a minimum of material, and if he sees how the teacher strives to meet the responsibility that he feels for the child first and how he makes even the weak feel some pleasure in school.

LOCAL REGULATIONS

Several references have already been made to the relations between state and district, local, and school courses of study, which must everywhere receive the approval of the inspector. Definite plans have not yet been adopted everywhere, since the period is one of transition and the conflict between the old and the new school still rages. Compromises are avoided which may seem too conservative to the radicals and too radical to the conservatives. For this reason courses of study that have already been tried and are not merely set up and planned for the future are popular. Working groups of teachers, and not only those in experimental schools, meet and discuss examples that have actually been put into practice. Reports of this kind are not followed blindly, but furnish a series of educational questions, practices, procedures, and materials that the reader can curtail, expand, or improve according to his need and ability. Examples of this type of report are Erler, O., *Arbeitspläne für den Gesamtunterricht in der Arbeitsschule* and the courses of study for the districts of Biedenkopf and Oelsnitz. (See Bibliography at the close of the present article.) If in these reports a suggestion is given, for example, for teaching the geography

of Germany in the sixth year according to topographical regions, there is nothing peremptory in it. A current event, like the withdrawal of the French from the Ruhr, may well afford an opportunity for dealing with the West of Germany first; or if a pupil returns after a holiday in East Prussia, his fresh experiences may justify a discussion of this section first.

An example of the relations between state and local courses of study may again be taken from geography. The Prussian *Suggestions* provide for the upper grades as follows:

The aim of instruction in geography is to give a thorough knowledge of the environment, detailed information about Germany and German-speaking regions outside of the Empire, general familiarity with foreign countries and parts of the world, and an appreciation of the place of the earth in the universe.

Instruction in the last school years, continuing from the foundation laid in the lower grades, must impart a knowledge first of the fatherland and then of the countries of Europe and of other parts of the world. Special attention is to be given to those countries in which Germans live and which have important relations with Germany. The basis of the treatment should be found in a regional study according to their geological development and natural conditions. The climatic and economic conditions and the distribution of population are to be presented in relation to these. Constant use must be made of the blackboard and drawing and sketches by the pupils. Local conditions should always be drawn upon for purposes of comparison. For this purpose walks and excursions are indispensable both for the study of the fatherland and the treatment of foreign countries. In the study of astronomy the starting point must also be the phenomena visible in the locality which the pupils should be encouraged to observe. The use of concrete materials should have as their aim only to explain and clarify information obtained by the pupils' own observation. The pupils should be

familiarized with the commonest stars and star charts, which will afford an opportunity to direct attention to the wonders of the heavenly bodies. Special importance is to be attached, particularly in rural schools, to the observation of the weather and to the comprehension of weather charts.

The distribution of material in the different school years is left to the individual schools. But it is desirable to include the study of the sky in all years, and in the closing lessons to review again the local environment and the fatherland from the economic point of view and in relation to world intercourse. The relations to other subjects, like civics and nature study, must be brought out. Toward the close of instruction on the environment the idea of local patriotism should be emphasized.

This general statement of aim and recommendation is dealt with in detail as follows in the *Lehrplan für die Volksschulen der Stadt Berlin*, 1924:

Fifth year: (a) The German Fatherland. (b) Day and night. The moon as a measure of time. Observations of the weather.

Sixth year: (a) European countries, outside of Germany (population, industrial development, ethnography, and distribution of plants and animals). (b) The globe (land and water), latitude and longitude. The motion of the earth. The sun as a measure of time (the day). Observations of the weather.

Seventh year: (a) Foreign countries, with special reference to those of significance to Germany (population, industrial development, ethnography, and distribution of plants and animals). (b) The sun as a measure of time (the year and its seasons). Climate. Eclipses of the sun and moon.

Eighth year: (a) The natural regions of Germany. Location and origin of Berlin. Economic life in Germany with special reference to the economic position of Berlin, and its relations to world economics (world intercourse). Germans abroad. Influence of geographical conditions

on peoples and their history. The forces that mold the earth. (b) The place of the earth in the universe (the sun and stars).

Everything else is left to the discretion of the teacher. Similarly in other subjects ample scope is left to the teacher. The Berlin 'Teachers' Society, it is true, had a thoroughgoing introduction to each of the subjects prepared by its educational leaders, but these also present only a broad outline, and give stimulus and indications of possibilities but not a method peculiar to the Society.

The Berlin course of study still defines the number of periods and the duration of integrated instruction, promises the abolition of promotion examinations, and gives an opinion on the system of specialist teachers; but on the whole it "strives to secure as great variety as possible in the work of the Berlin elementary schools." Even the fear that children who pass from one school to another would not be able to fit in readily because of differences between schools had no effect. The authors of the course and the bodies that sponsored it are convinced that a child whose intelligence has been developed for its age, no matter by what method, brings an intellectual versatility which enables it to adjust itself to the standards of work required in the new situation.

The Leipzig course of study of 1920 goes further still. In its nine octavo-size pages it deals in broad sweep with the time to be devoted to the different subjects in each year and to their general content. Additional material is given on the classes for special and gifted pupils and in the optional courses, such as foreign languages and shorthand. All definitions of the aims of the various subjects, all suggestions and recommendations on method are regarded as out of place.

Elsewhere, as in Halle, for example, the course of study enters extensively into details, but only makes certain sections compulsory, while the rest are recommended as sug-

SOME TIME SCHEDULES

Prussia

FOUNDATION-SCHOOL				
Subject	1	2	3	4 Year
Religion	Integrated Instruction	4	4	4
Heimatkunde		9	10	11 (10)
German				
Writing		2	2	2
Arithmetic		4	4	4
Drawing		—	2 (1)	3
Singing		1	2 (1)	2
Physical exercises		2	2	3 (2)
Needlework		—	— (2)	— (2)
Total	18	22	26	28

UPPER GRADES								
Subjects	Boys				Girls			
	5	6	7	8	5	6	7	8 Year
Religion	4	4	4	4	4	4	4	4
German	8	7	6-7	6-7	7-8	7	6-7	6-7
History and civics	2	2	3	3	2	2	2	3
Geography	2	2	2	2	2	2	2	2
Nature study	2	3-4	3	3	2	2-3	3	3
Arithmetic and geometry	4-5	5-6	5-6	5-6	3-4	4	4	3
Drawing	2	2	2	2	2	2	2	2
Singing	2	2	2	2	2	2	2	2
Physical exercise	2-3	3	3	3	2	3	3	3
Manual work	(2)	(2)	(2)	(2)	—	—	—	—
Needlework ¹	—	—	—	—	2	2-3	2-3	2-3
Total	28-30	30-32	30-32	30-32	28-30	30-32	30-32	30-32

¹ Where domestic arts are introduced for girls two of the four hours to be devoted to it should be provided by reducing the time for other subjects.

gestions for free election. Since most teachers readily follow textbooks in reading, arithmetic, or singing that are prescribed or prepared by teachers' committees, uniformity is thereby guaranteed.

The rural school presents the greatest difficulties. Its peculiar needs have in the last few years attracted many educators to undertake the task of preparing courses of study, in contrast with the neglect of the rural school that used to prevail. The legal and ministerial regulations make no other provision than that the courses of study and time schedules of the one-teacher schools should be adapted to those in the large schools, the local conditions being taken into account. The authorities mean to imply that the best results can be obtained by giving free scope to the stronger teachers. Such questions as the sectioning of the pupils or the combination of sections, the proper time for silent occupations or common activities, the desirability of an assistant for the younger pupils, all these are left to the discretion of the teachers. The only general suggestions are that the first-year pupils be taken separately for several periods a week, that the arrangement of school in the forenoon for the upper section and in the afternoon for the lower section be replaced by a more elastic full-day school, and that use be made of alternating annual courses in order to provide a wider range of subject matter.

In *Saxony* the following minimum and maximum number of weekly periods for each school year are assigned :

	1	2	3	4	5	6	7	8
Minimum	16	18	20	22	28	28	28	28
Maximum	18	20	24	26	30	30	30	30

The accompanying time schedule, suggested for the schools of *Brunswick*, is given as an illustration of the situation found in ungraded schools and schools with a small number of teachers :

TIME SCHEDULES OF DIFFERENT TYPES OF SCHOOLS — BRUNSWICK¹

No. of Teachers	1	2	3	4	5	6	7
School Year	1-4 5-8	1 2-4 5-8	1 2-4 5-6 7-8	1 2-3-4 5-6 7-8	1 2 3 4 5-6 7-8	1 2 3 4 5 6 7-8	1 2 3 4 5 6 7 8
German	6 (4)	7 $\frac{1}{2}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{1}{2}$
Object lessons, Forms, drawing .	2 —	4 2 —	6 3 —	3 —	5 —	—	5 —
Religion	2 2 (1)	2 2 2	2 2 2	2 2 2	2 2 2	2 2 2	2 2 2
History	(1)	— 2	— 2 2	— 2 2	— 2 2	— 2 2 2	— 2 2 2
Arithmetic.	—	—	—	—	—	—	—
Geometry . . .	6 5 (2)	6 5 $\frac{1}{2}$	6 5 5 $\frac{1}{2}$	6 5 5	6 6 5 5 $\frac{1}{2}$	6 5 5 5 $\frac{1}{2}$	6 5 5 5
Geography and environment . .	— (2)	— 1 2	— 2 2	— 2 2	— 2 2 2	— 2 2 2 2	— 2 2 2 2
Nature Study . .	2 (1)	— 2	— 2 2	— 2 2	— 2 2 2	— 2 2 2 2	— 2 2 2 2
Caligraphy . . .	3 2 (2)	2 1 $\frac{1}{2}$	2 1 1 $\frac{1}{2}$	3 2 1 $\frac{1}{2}$	3 3 2 1 $\frac{1}{2}$	3 3 2 1 $\frac{1}{2}$	3 3 2 1
Shorthand	—	—	—	—	—	—	—
Drawing and forms	— (2)	— 2	— 2 2	— 1 2 2	— 1 2 2	— 1 2 2 2	— 1 2 2 2
Singing	1 2 (1)	2 1 2 $\frac{1}{2}$	1 2 2 2	1 1 2 2	1 2 2 2	1 2 2 2 2	1 2 2 2 2
Physical exercise	— 2	— 2	— 2 2	— 2 2	— 2 2 2	— 2 2 2 2	— 2 2 2 2
Total	20 28 (2)	20 28 (2)	22 28 (4)	22 28 (4)	22 28 (4)	22 24 25 26 28 28	22 24 25 26 28 28
Additional Needlework . . .	2 2	— 2 2	— 2 2	— 2 2	— 2 2 2	— 2 2 2 2	— 2 2 2 2
Games	—	—	—	— 2 2	— 2 2	— 2 2 2	— 2 2 2 2

¹ The figures in parentheses indicate the number of periods in which classes may be taught together. The time schedules for the single-teacher school are suggestive only. In the lowest grades teachers must take care to provide for suitable physical training.

PARTICIPATION OF TEACHERS IN CURRICULUM PLANNING

Institutions for the preparation of teachers only occasionally introduce their students to the problems of curriculum planning directly, although they come up indirectly in the discussion of theory of education and special methods. The teachers' study circles, in which young teachers in each district must participate until they have passed the second examination, which entitles them to permanent appointment, devote much attention to curriculum making, in particular to meet the difficult conditions in the rural schools. They engage actively in preparing lesson plans on the principle of the environment first, collect material on the local environment, and place exhaustive source material at the disposal of every teacher in the locality. The annual district conferences frequently discuss problems of the course of study and afford the inspector opportunity to collect ideas and tendencies based on practice.

Every district school committee, every teachers' association of any size, has a curriculum committee constantly engaged on the improvement of existing courses of study and benefits at the same time from the exchange of ideas, to which numerous individual teachers contribute from their own private studies, especially in single subjects like history, moral instruction, and so on. The authorities readily call on such committees to prepare new courses; as, for example, in Bremen, Leipzig, and Hamburg. In other places, as in Mecklenburg-Schwerin and Thuringia, they invite experienced teachers from time to time to coöperate with representatives of the Government and inspectors in working out new schemes. In Saxony the Transitional Education Act of 1919 expressly provides (under Section 10) that "the teachers' council of each school discuss and decide on the course of study and the principles to be employed in drawing

up the time schedule." Rarely has a district board of education had occasion to object to the decisions of these self-governing bodies.

The public is little concerned with problems of the curriculum, except occasionally when the question of religious instruction comes up. On the whole the parents do not interfere, although they have the opportunity to visit classes and to criticize the instruction. The press pays little attention to problems of the new school; when it does, it is generally for political rather than educational considerations.

EDUCATIONAL PSYCHOLOGY AND THE CURRICULUM

The influence of the different schools of psychology on methods was discussed in the *Educational Yearbook, 1924*, pp. 537 ff. They have wrought equally fundamental changes in the courses of study, quite apart from the influence of standard and achievement tests. They have freed the child from the pressure of utilitarianism as soon as the demands of the environment and preparation for life as an adult were accepted as the only guiding principles. This may be seen in a comparison of the statement of aims in the laws of Saxony in 1873 and in 1919:

1873: The function of the elementary school is to impart to the young through instruction, drill, and education the basis of moral and religious training and the general knowledge necessary for life as a citizen.

1919: The function of the elementary school is to promote the development of the children through systematic exercise of the physical and intellectual powers to the end that moral living may be unfolded, and to train them to devoted recognition of duty in the interests of society.

Since the lesson of educational psychology is that it is not the possession of knowledge but its acquisition that is important, that the basis and direction of all education lie

in the natural, active development of the powers of the child, regulations on the curriculum like those of Thuringia become possible: "All premature work or overburdening, especially through home lessons, must be strictly avoided." The principle of the same education for all must be replaced by the principle of differentiation according to inclinations, abilities, capacities, and strength of will. In theory, though not everywhere in practice, Kerschensteiner's axiom on the educative process is recognized, that "the education of the individual is facilitated only through that cultural content which in nature and quality are adapted wholly or in part to the individual's psychological make-up."

The elementary school is no longer conceived of as an institution that can give a completed education and that must include whatever may some time or in some place in the future be useful. A part of the general task is to-day undertaken by the compulsory continuation school. The elementary school will, of course, give the preference in the selection of materials suitable for children to those that are significant for life. The principle, "start from the child," must be understood to mean that the child's capacities, not his caprice, must be the determining influence.

The most exaggerated interpretations of the lessons of educational psychology are made by the Hamburg teachers who expect the authorities to approve a statement like the following (*Denkschrift, 1925*):

It makes no difference on what content material the powers of the child are developed. The attitude of the teacher and the inclination and capacity of the pupil determine the choice of particular fields and methods of activity. The class should not be hampered in its activity by time schedules, distribution of subject matter, and a course of study. Examples and collections of examples in each field of activity as well as any kind of systematic selection are not to have any binding force.

No authority can go so far ; it must take educational theory and psychology into account and give them a place of leading importance, but cannot allow them alone to be dominant in the school. The Hamburg board of education (and to a lesser degree the ministries in other states) shows its readiness to be sufficiently progressive when it provides that :

The educational needs of the child primarily and not any regard for the kind of knowledge that is desirable for later life are the determining factors in the organization of schemes of work and the tasks that are based on it. . . . In the center of activity is the active child with his own peculiar abilities and powers. The pupils should not merely be receptive but rather should learn how to study ; that is, guided by the teacher in the methods of observation, experimentation, reaching conclusions, and investigation, he should acquire information for himself and gain power and independence on the basis of practice.

CURRICULUM EXPERIMENTS

While the psychology of growth has not advanced sufficiently far to furnish a reliable standard for the selection of educative materials for different ages, there are available some valuable experiments in this field. These analyze the various aspects of human capacities, consider them strictly in the light of the age of the child, and observe what has been definitely established by science on the appearance and growth of capacities. They break completely with the quantitative conception of education and regard education rather as the training of the individual as a physical-psychological whole. Just as classification according to subject matter disappears, so classification by grades must be abandoned, for "education is a gradual process, and only caprice sets up eight barriers to this process" (Weise). Accordingly classification is proposed according

to stages of development and growth, somewhat as follows :

Stage of childhood (up to the eighth year)

Stage of concrete experiencing (ninth up to twelfth year)

Stage of early puberty (eleventh to fourteenth year).

With the help of the educator the child should gain ability : (1) to see a picture of the whole of life in his own environment ; (2) to use language as a means for accurate and intelligible expression of his own thoughts, and to participate fully in the cultural life of the present through language ; (3) through his hand and body to express his ideas with beauty and appropriateness for the enrichment of life ; (4) to coöperate in the fullest development of social living and to recognize the emancipation of man as an unending, moral task ; (5) to appreciate and promote social relations in life activities ; (6) to understand changes in modern life as a result of historical causes ; (7) to appreciate the meaning of law in nature and to place them in the service of humanity ; (8) to formulate a personal philosophy in the face of tradition.¹

The educational forms of school activities are play, work, instruction (systematic school studies including drill), and celebrations. The teacher, however, is not expected to divide the weekly periods according to a scheme to include the fundamental activities and forms here mentioned ; rather should he find the starting point in the psychological needs of each age as they are manifested in direct relations with nature and life. Dogmas on method are out of place, and integrated instruction, for instance, is neither imposed nor prohibited. Instead of regulations that prescribe to the

¹ RIEDEL, KURT, in *Pädagogische Beilage, Leipziger Lehrerzeitung*, February, 1925.

teacher what he is to do from day to day, he is stimulated to formulate his own plan, and to collect, arrange, and distribute materials for himself. Practical hints are desirable, but all educational activity must be dominated by the formula: Adapt the methods of instruction and the activities of the child to his nature, the situation, and the connotation of the aim that you have adopted. The obligation to be with the child at a certain place at a certain time disappears, but it is still desirable to indicate the goals attainable by the average pupil with normal progress, and by the less endowed and the highly gifted in longer or shorter time.

The course of study for Chemnitz, for example, makes the following suggestions for arithmetic in the third and fourth years:

Within situations intelligible to him the child counts, subtracts, analyzes, compares, multiplies, divides, breaks up, and measures. Knowledge of the usual measures is acquired through actual experience. The simplest geometrical forms are learned concretely. The development of our system of numbering must be understood. The written form of the first four fundamental operations must be practiced in their application to the usual measures of length, area, quantity, weight, time, and monetary values.

Nothing more is given than this. Such general regulations may elsewhere be illustrated by examples or reports of practical work, which have no place in a course of study. The main principles, since they are concerned with the organization of the educative process, have universal validity, but the content, the local stamp must be discovered by each teacher for himself or by each school district for any particular locality concerned.

From the teacher there is thus expected a penetrating study of the child and an all-round appreciation of the edu-

cative process, which to-day are possessed by few. No nation yet gives its educators a preparation that enables them to use courses of study properly or to draft them with a promise of results. Courses of study neither can nor should be standardized to-day, but their full development belongs to the future. And when that time comes, then the free creative teacher should base his own independently conceived course on them.

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THE PROBLEM OF THE ELEMENTARY
SCHOOL CURRICULUM, UNITED STATES

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PROBLEM OF THE ELEMENTARY SCHOOL CURRICULUM IN THE UNITED STATES

IMPORTANCE OF THE PROBLEM

In recent years the problems of the elementary school curriculum have begun to overshadow all others connected with the public schools. Meetings of the National Education Association and its affiliated societies have been largely devoted to the consideration of questions related to the problems raised; a number of recent *Yearbooks* of these organizations have been devoted to the elementary curriculum, and commissions have been appointed to deal with specific subjects. Within the schools themselves more attention is being given to courses of study than at any previous time in our history. During the three years ending with 1925 more than eight hundred new courses have been issued, representing, however, but a small proportion of the school systems that have undertaken the revision of their courses of study. It would, in fact, be difficult to find any state or city that is not giving this matter careful consideration. In teachers' colleges and normal schools there are many courses intended to shape the policies of and to assist those who are dealing with curriculum construction.

Attention to the subjects that should be taught in the public schools is not limited to those individuals and organizations that are directly concerned in school affairs. Numerous national, state, and local associations have educational committees, and from these committees there flows a constant influence that is felt by school officials. The bibliog-

raphies of recent books, articles, and pamphlets that deal with the curriculum are very large.

Never before has so widespread an interest been manifested throughout the country in the question of what to teach. In the early part of the decade, beginning with 1890, the attention of leaders in education was directed to the development of new courses of study for the public schools. Students who were returning from abroad brought with them the influence of Herbart, and the result was a demand for adjustment in the subjects that should be taught as well as for changes in teaching methods. But interest in these changes was by no means general; it was confined to the leaders in the field of education. Teachers and others who were directly connected with the schools did not become active in the movement to change the subjects that were taught; they expected to be told what to do rather than to exercise their own initiative in determining for themselves what the courses of study should be.

The years that followed this period, devoted to an effort to determine *what* should be taught, were followed by two decades during which attention was directed chiefly toward the problem of *how* to teach. The extent to which this emphasis on the methods of teaching was carried is shown by the character of the courses that were offered in the institutions for the training of teachers. Here the tendency was to increase the number of courses that had to do with the teaching of specific subjects; the special methods courses greatly outnumbered all others and subject matter courses had to be neglected because of lack of time. This practice was challenged in the report published in 1918 by the Carnegie Foundation on the *Preparation of Public School Teachers*, in which the suggestion was made that many of the special-methods courses could with profit be replaced by those that would connect subject matter and method. The idea of

“professionalized subject-matter courses” has made a strong appeal and many such courses have been introduced in teachers’ colleges and normal schools. School authorities are as greatly concerned with good teaching now as ever before, but they are making efforts to combine in one unit good command of subject matter and good methods of teaching.

COURSES OF STUDY AND SCHOOL PRACTICE

In theory courses of study have been the guides of specifications according to which the education of the pupils should proceed. In practice this has seldom been true. There have, in fact, been many schools, not necessarily limited to rural sections, in which no definite courses of study existed; in other places the courses of study have been so meager that the entire work of a class for a year appeared on a single page. Relatively few courses have been of such a character as to serve as a helpful guide for the teacher, with the result that teachers have been careful to treat those parts of the courses that were likely to be used as tests by the superior officers while the rest was ignored.

The work of the teachers has, in fact, been controlled more by the textbooks, for a large proportion of the teachers do not possess sufficient knowledge of the subjects that they are expected to teach to be able to dispense with the textbooks. Equally important is the fact that in most one-room schools the organization has been such as to require the teacher to deal with thirty or more different lessons a day; in such schools a textbook in the hands of the pupils as well as in the hands of the teacher has been essential. Where there is any difference between the course of study and the textbook, the latter is followed. So pronounced has this practice been that there are few places where a teacher can

allow the pupils to omit any part of the textbook without arousing a protest on the part of the parents.

The courses of study have exercised an influence on the making of textbooks, for authors are naturally anxious to meet requirements set up for the schools. Usually textbooks are written with the expectation that they will be used in all parts of the country and under all conditions. This compels the authors to follow very general tendencies rather than the specifications of a course that may differ from common practice. In some states there is state-wide adoption of textbooks to be used in all schools; in such cases definite efforts are often made to write and to submit for adoption textbooks that meet the requirements of the state course of study. In spite of the fact that such books are specially prepared, in competition with those that are prepared for general use, the latter are usually selected. It is common for textbooks, especially in geography, to have supplements that meet some particular state or city requirement. The influence of the course of study is also found in special state editions.

Sometimes the case is reversed and textbooks exercise a marked influence on the course of study. Authors who have definite convictions about the need of improvement in current practices have sometimes had the courage to write books embodying their ideals. Some of the books that have been developed in this way have been remarkably successful in influencing the curriculum. Nearly all the popular textbooks in geography have represented the peculiar personal views of the authors rather than adherence to current practice. This influence of the textbook on the course of study has been especially noticeable in the so-called skill subjects such as penmanship, drawing, and music. In these subjects the textbook often becomes the course of study for the schools concerned, and there are even places where the course

of study merely indicates the pages of a textbook to be followed for a given term or grade.

The absence of direct influence of the courses of study on the actual work of the classrooms has led many teachers to doubt the value of devoting time to any attempt at revision. They have been quite content to follow the textbooks that were provided for their classes. The reason for the failure of the courses is that they have not been closely related to the work of the class; they have either contained general directions that the teacher could not follow or they have given explicit directions that have been out of keeping with the practice with which the teacher is familiar and which the book requires. Textbooks, on the other hand, can be used, with the result that they have exercised more influence in practice than the courses of study.

In two points, however, courses of study are having important effects: first on the placing of the subjects in the different grades, and second on the time allotted to the teaching of each subject. In many schools the promotion of pupils depends on the passing of tests that are made out by some school officer other than the teacher, who must accordingly follow the sequence of subjects indicated in the course of study. In some school systems considerable importance is attached to the teacher's daily schedule, which must generally have been approved by a superior officer. In apportioning time to the various subjects the teacher must be governed by the allotment of time provided in the regulations. In these two particulars courses of study exercise their most pronounced influences over the conduct of the schools.

LOCAL RESPONSIBILITY FOR COURSES OF STUDY

The states are entirely free from dictation by the federal government in all matters affecting the public elementary

schools. These rights have been guarded by the states with jealous care and any attempt to enact laws that might lead to federal control is sure to meet with effective opposition. This sovereignty of the states in educational matters extends to the relationships between the states. Two states may have the same or equal requirements for the certification of teachers, yet a certificate issued in one state may not be acceptable in the other. Only in recent years have some of the states entered into reciprocal agreements concerning teachers' certificates. In all matters relating to the courses of study the states are entirely independent.

The claim that public education is a state function has been affirmed by court decisions. Yet there are few states that make any effort to control the various phases of education beyond insisting upon certain minimum requirements established by law. It is customary for each state to issue courses of study for public schools which are intended to guide the work of rural and village schools; cities and larger towns are seldom required to conform to such courses. The tendency is to encourage local authorities to regard state courses as a statement of the minimum requirements for a good school program, and it is expected that all authorities that are able to do so will prepare courses of study that more nearly meet their own needs.

The effect of local control on the curriculum of the elementary school is very pronounced. Places that are separated from each other by mere political boundary lines often have such different requirements that it is difficult, if not impossible, for pupils to transfer from one school system to the other without suffering the loss of a school term or even of an entire year. An example of this type of local responsibility may be found in the allotment of time to the different school subjects; the amount of time that is allowed for the teaching of some of the subjects, such as civics, ele-

mentary science, and industrial arts, in one system is sometimes several times that allowed in a neighboring locality. This may even be true of different schools in the same city. Such subjects as reading, arithmetic, and geography do not vary as much in the time allotted to them as do other subjects, but even in these the differences are sometimes sufficiently marked.

The school year in which specific subjects are taught also shows great variations. The *Second Yearbook* of the Department of Superintendence gives the results of a study of the grade placement of all the regular subjects. It shows that among 305 cities that reported 102 taught silent reading in all the eight grades of the elementary school; 29 cities taught it in the first six grades; 15 cities began silent reading in the second half of the first grade and continued it through the eighth grade, while 24 cities began the subject in the second grade, 33 in the third, 25 in the fourth, and 6 in the fifth, and 4 postponed the teaching of silent reading until the sixth year. In these cities there were 28 different arrangements of time for teaching this one subject.

The same report shows that in 291 cities that reported grammar was taught in 13 cities through the entire eight grades; 8 cities began this subject in the third year, 14 began it in the fourth grade, 30 in the fifth grade, 60 in the sixth grade, while 81 cities reported that they postponed the study of grammar until the seventh grade. Fourteen of the cities reported that the study was completed in one year in the sixth grade. All of the subjects showed very large variations in this grade placement. Even the topics within a subject are placed in different grades in different cities.

Many causes have contributed to these variations in the time allotted to the different subjects and in the grade in which they are placed. The idea that uniformity in education is a condition to be avoided, and that any effective plan

for educating the young must be based upon meeting their own particular needs has prevailed and has justified the attention given to local differences. It has been easy to make a false application of this principle and to make a virtue of differences in methods of administering the courses of study rather than to be concerned with those significant distinctions that really deserve consideration.

There is no legal way of preventing those in control of the schools from incorporating their own opinions into the practice of the schools. Often some school official has thought that a subject could be better taught in some grade other than the one in which it is customarily placed, and the change is made even though this opinion is seldom backed by any objective evidence. These and other less obvious conditions have conspired to bring about great diversity in all matters relating to courses of study in the United States.

The result of great variations in the courses of study has not always been beneficial to the pupils concerned. The school population is a changing one. Families move from one city to another and from one state to another with surprising frequency. Data for the entire country are lacking, but in the studies that have been made in several cities it has been shown that of the pupils in the upper grades only a small proportion have frequently been in attendance continuously in one school. Some of the pupils have moved from the rural sections to the cities and often from city to city so that they have been in several school systems, while movement from one section of a city to another is even more common.

Pronounced differences in the courses of study tend to cause children who change schools to lose time. Several informal studies show that the extent of retardation among pupils in the upper grades correlates closely with the number of different schools that they have attended. There may

be causes other than that connected with moving that contribute to this retardation, but there can be no doubt about the bad effects on children when they enter schools that have markedly different standards for the placement of subjects. An example of this difficulty can be seen in the different practices that are followed in the placing of long division. In most schools this topic is taught in the fourth grade; some schools, however, place it in the fifth grade, and there are a few that place it in the third. Any fifth-grade child who changed from a school in which long division was taught in the fifth grade to a school in which it was taught in the third or fourth grade would be one year behind in arithmetic. Such loss of time and the consequent discouragement on the part of the pupils are receiving the attention of the authorities.

It is maintained by some that all the subjects and topics in the courses of study should be uniform in the various cities and states. The question has been raised as to the desirability of reasonable uniformity in such subjects as may be considered fundamental and therefore likely to be taught in all schools. States have the authority to enact legislation that will bring about greater uniformity within their borders, but this is not likely to happen. While the different legislatures have made the teaching of some subjects mandatory, these acts have often had the effect of creating greater diversity. The only influence that can be effective in producing agreement in the courses of study used in different places is to be found in a definite agreement on the aims and objectives of education.

METHODS OF CURRICULUM REVISION

There is a noteworthy tendency toward coöperation in curriculum revision. The earlier efforts were largely confined to the leadership of individuals or at most to small

groups. Frequently the course of study that was adopted for an entire state was drafted by a single person. Such courses were largely compilations of those sections of existing courses of study that appealed to the author. At present the conditions are markedly changed. States and cities no longer intrust the revision of the courses of study to individuals nor even to small groups, but advantage is taken of the contributions that may be made by all agencies that can be brought into coöperation.

One of the most important agencies that is coöperating with states and cities in the work of curriculum revision is the National Education Association. At the annual meeting of the Department of Superintendence held in February, 1923, a Commission on the Curriculum was appointed "to bring together the elements of a suitable curriculum for the boys and girls of American public schools." The membership of the Commission was composed of thirteen influential superintendents and heads of educational institutions. During the three years that this Commission has been in existence it has coöperated with a large number of subcommittees which have dealt with particular subjects.

The *Yearbook* of the Department of Superintendence for 1924 was devoted to the work of the Commission. During the first year its attention was centered upon policies to be followed in succeeding years. It was decided that the first year should be devoted to the collection and analysis of general educational aims and objectives as they were revealed by a statement of current curriculum practice. The *Yearbook* presented a statement of these aims and objectives. The machinery for coöperative efforts in curriculum revision was also proposed by the Commission.

The efforts of the Commission in the second year were directed to the collection and analysis of outstanding research studies in each of the subjects of the curriculum. Although

there are many studies of this character, they have not been in such form as to be accessible to those who might profit by their use. The Commission decided to prepare these studies in such a way that they would be readily understood and usable by those charged with the responsibility of curriculum revision. The Division of Research of the National Education Association, assisted by twelve subcommittees, conducted a search for both published and unpublished studies on the elementary school curriculum. The *Third Yearbook* of the Department of Superintendence contains an analysis of the studies that were selected. The limited time available did not permit of an exhaustive search for studies and investigations, but the collection that was presented has been suggestive and is serving a valuable purpose.

The Commission proposed "that for the school year 1925-26 as many school systems as will shall agree to coöperate in testing the findings of research studies reported in the *Third Yearbook*, that new studies be undertaken, and that the results be placed at the disposal of the country through the Department of Superintendence." This proposal was adopted and nearly three hundred school systems scattered throughout the country have been coöperating under the leadership of the Commission.

The National Society for the Study of Education has been energetic in the study of problems affecting the curriculum. Each year the Society meets with the Department of Superintendence, and the *Yearbooks* prepared by its committees have been among the most valuable contributions that have been made to the subject of curriculum construction. Recent *Yearbooks* have dealt with the following topics: adapting the schools to individual differences; reading; social studies; English composition; silent reading; and other topics of a similar nature.

Valuable contributions to curriculum revision have been

made by divisions or bureaus of research connected with the larger school systems. The directors of these organizations are thoroughly trained in the methods of research, and the duties of their offices have made it necessary for them to consider many of the problems that are of significance in the courses of study. Many of the studies made in this way are printed and available wherever the revision of the course of study is under consideration.

Teachers' colleges and the education departments of universities are conducting significant research investigations into the problems of the curriculum. In some of the institutions large bodies of graduate students are conducting exhaustive studies under the direction of competent professors. Much of the research work is done in connection with the elementary schools attached to these institutions as model or demonstration schools.

Scattered throughout the country are a considerable number of experimental schools; free from the restrictions that usually surround the public school their directors can follow out new plans and investigate the latest theories in education. Some of these schools have been very influential in modifying the work of the public schools. At present some important curriculum experiments are under way in schools of this type. The results are being made available for the public schools, while in some cases public schools are coöperating in the experiment.

In addition to the agencies that have been mentioned there are a large number of others that are not so well defined. The American Association of University Women has decided to devote itself for a period of years to the study of elementary education; parent-teachers' associations are being utilized by those concerned with curriculum revision. Various national organizations of a general character have educational committees that are coöperating with the school

officials. Finally, several of the large educational foundations are providing funds to be employed in research and investigation into the courses of study.

SOME PRESENT CAUSES OF DISSATISFACTION

There are three outstanding causes for the present dissatisfaction with the courses of study in the elementary school. The first and possibly the most important of these is due to the failure of the school to adopt the theories that have been advanced by educational leaders and accepted by those connected with the schools. In general, the schools of the United States are conducted in accordance with aims and principles that are strangely out of keeping with those that are held to be sound. School work has tended to be an exercise of memory and to deal with matters that are somewhat remote from the interests and needs of children. Elementary education is, therefore, a preparation for adult life and the pupils' minds are filled with facts that may be useful in the future, but whose utility at present is too remote for the child to realize. Opposed to this practice is the conception that self-expression on the part of the child is an essential means of education. A curriculum that would conform to this theory of education would provide activities in which the child might engage. In existing practices the curriculum has been largely composed of the facts and skills that are to be used in adult life.

A second cause for dissatisfaction is concerned with the question of training for citizenship. It has always been assumed by the public that the chief purpose of the school is to develop effective citizens. In the past, however, there has been little question regarding the efficiency of the public schools in producing desirable citizens. At present the effectiveness of the school in this matter is under serious criticism. Many are urging that training for citizenship shall be given

definite consideration in the school and not be considered a by-product, as has been the case hitherto.

A third cause of dissatisfaction with the present curriculum is the excessive number of different subjects that are presented to children in the elementary school. No less than twenty different subjects are found in most of the grades of the elementary school; each of these subjects tends to have its own organization and in many schools each is taught by a specialist in that subject. This condition has brought about a crowding of the curriculum that is deplored by teachers and school officials generally. It is urged that children cannot under existing conditions obtain any adequate conception of any of the subjects.

ADMINISTRATION OF CURRICULUM REVISION

Coöperation in curriculum revision extends into the school system itself. No member of the administrative or teaching staff is free from responsibility for changes in the curriculum as they affect his own work. This represents a marked change in policy on the part of school officials. Teachers have seldom had a part in the making of the curriculum, as supervisors, heads of departments, or superintendents did the work with such assistance as they desired to enlist. It often happened that the first knowledge that the teacher had of a revision came when the new courses of study were delivered to them in completed form. This policy has been changing gradually until now it is completely reversed. It would now be difficult, if not impossible, to find a city or a state in which the teachers, as well as the other school officers, are not definitely associated with some serious attempt at curriculum revision.

Various influences have contributed to bring about coöperation in this work of curriculum construction. Foremost among these is the improvement in the preparation of

teachers. During the past decade there has been a vigorous campaign to secure better trained teachers. In part this has been achieved by requiring higher qualifications for certification. Normal schools offering three years of training beyond high-school graduation and teachers' colleges with the full four-year courses are becoming common. The graduates from these institutions have an equipment that should be valuable to them in dealing with curricular problems.

Many teachers have received additional professional training while in service, and many thousands have attended summer schools in universities, colleges, and normal schools. In fact, the salary schedules are often so arranged as to provide extra remuneration for those who attend summer schools. The influence of this training is felt in the schools of the country and in most cities there are among the elementary-school teachers many who are capable of making real contributions both in subject matter and in methods.

Teachers are becoming organized in such ways as to make their influence felt in the development of school policies. In some of the larger cities there are teachers' councils or associations that exert large influence in their own systems. While the attention of these organizations is not confined to the strictly educational affairs of the school, it is more pronounced in this phase of the work. Usually there is nothing of a legal nature that would prevent the school administrators from completely ignoring the recommendations of such teachers' associations. In practice, however, this seldom occurs, and in some cities there is a definite effort to encourage teachers to feel a responsibility, particularly for the educational part of the school work.

There is a belief on the part of school administrators that coöperation in curriculum revision is a most effective way of improving their teachers. With the organization that provides competent leadership it is possible to bring every

teacher into touch with the important features of the work that she is expected to accomplish in the classroom. Coöperation in the revision of courses of study may thus serve the double purpose of providing more usable courses and at the same time of assisting in the improvement of the teachers.

The extent to which the coöperation of the staff is desired can best be indicated by describing several of the organizations that are actually in existence in certain cities. It must be remembered that there is no single form of organization for the revision of courses of study that is in universal use. Each city or each state finds it necessary to adapt its organization to meet its own conditions. Larger cities having research departments are in a position to have an organization quite different from those where no such facilities exist. Some cities are able to employ directors of the curriculum; in some places there are abundant funds available for the employment of outside experts; in still others all that can be accomplished must be done by those who are regularly in the system.

In Los Angeles the superintendent of schools with her staff of deputy and assistant superintendents is in control of the revision of the curriculum. The administration and leadership of the work are delegated to a department of course of study employing a director and two assistants. Associated with this department is a general curriculum committee consisting of the primary supervisor, five teachers, five principals, and one psychologist from the department of research. The supervisor of a subject is made chairman of a committee of teachers for that subject. Committees are in existence for the following subjects: reading and literature, English expression, writing, social studies, art, arithmetic, physical training, agriculture, nature study, industrial arts, primary manual training, and music. These committees are advised and directed by the department of course of study and their

work is submitted to the superintendent of schools for adoption within the school system.

Considerable activity has been shown in curriculum revision in Denver, Colorado. The following description of the organization that has there been used is taken from an article by A. L. Threlkeld, Assistant Superintendent of Schools: ¹

The Denver program of curriculum revision is operating under the following three principles:

1. No program of study will operate that has not been evolved out of the thinking of the teachers who are to apply it. It is, therefore, necessary to have committees of teachers at work in each of the fields represented in the program.

2. It is necessary for these committees to be stimulated in their work, coördinated, and continually directed in their activities by organized supervision.

3. Universities and other agencies throughout the country for several years have been carrying on very valuable curriculum revision investigations in their research departments. All discoveries made by these efforts should be appropriated as far as possible. Any course of study put into operation in Denver should represent the last word of investigation in its particular field.

Pursuant to these ends the following organization has been set up:

Application of Principle Number 1: There is a committee for each subject in the elementary schools. The committee in each instance is made up of teachers and principals with certain supervisors as ex-officio members. A teacher is chairman in each case. Committee members are chosen in such a way as to get the maximum distribution over the school system. Likewise, in the junior and senior high schools, there is a committee for each subject with one set of committees for the junior high schools and one for the senior high schools. Each high school is represented by one member on every committee. In all cases the committee member is held responsible for enlisting his school in the work of his committee. The board of education has made

¹ In the *Second Yearbook* of the Department of Superintendence.

an appropriation for substitute teachers so that these committees can have a certain amount of school time for their meetings. Several rooms in the administration building have been equipped for committee meetings and been given over entirely to their program.

Application of Principle Number 2: A department of curriculum revision has been established. (The director of curriculum revision is responsible to the superintendent for the direction of the work of his department. To assist him in supervising the work of committees several specialists from outside cities have been employed. These men meet personally with the committees and make available to them all printed reports and materials of all kinds bearing on the problems at hand.)

Application of Principle Number 3: The board has made an appropriation to cover the expense of bringing experts in curriculum revision to Denver for personal interviews and direct discussions with committees. Various people who represent significant research in curriculum making will be brought to Denver for their several contributions. They will criticize the work of committees and give their suggestions as to how the work should be further directed. In some instances this service will be obtained by correspondence. In such cases tentative committee reports and carefully prepared questions will be sent to the person who has something definite to contribute on the points involved.

A plan of organization for the revision of the curriculum has been developed for Houston, Texas, by Dr. Herbert Bruner, Director of the Bureau of Curriculum Research at Teachers College, Columbia University. The superintendent of schools, who is in charge, is assisted by an executive committee of seventeen members. The duties of this committee are to formulate policies, determine the sequence of work, provide leadership to subcommittees, and finally to pass upon the work prepared. The subject-matter section of this committee consists of seven members, including one representative from each of the following fields: English,

related arts, foreign language, mathematics, physical education, science, and social studies. The administration section is made up of ten members chosen from the following fields: high schools, elementary schools, special schools, night schools, and research department. There are 62 subcommittees, of which 40 are concerned with subject matter and the preparation of courses of study under the direction and leadership of the executive committee. Administration is dealt with by 22 subcommittees whose duty it is to determine the various policies relating to the administration of the course of study. There are 76 research committees charged with the task of presenting to the subcommittees the findings of research investigations available through educational literature, of preparing bibliographies and abstracts needed by the subcommittees, and of studying local conditions. The plan provides further for five reviewing committees consisting of a lay reviewing committee, a psychological reviewing committee, a legal reviewing committee, a supervisors' reviewing committee, and an educational expert reviewing committee.

The plans of organization for the revision of courses of study that have been described here indicate the type of coöperation that is expected of those within the school system. It is characteristic of all of these plans to provide assistance so that curriculum revision does not become an added burden to the people concerned. The courses of study formulated under this coöperative organization are beginning to appear. Sometimes they have not differed in any marked way from previous courses. The fact remains, however, that the teachers and all of the other school officers have become keenly aware of the difficulties that the course of study presents and are making vigorous efforts to remedy such defects as are manifest.

The use of specialists to assist in revising courses of study is a common practice among the states and cities. College

and university professors, who have made special studies of the administration of curriculum revision or who have advanced proposals in reference to the curriculum, are employed to meet with the staff and sometimes to direct the undertaking. At present, however, a more common practice is to employ such specialists to criticize the work of the various committees and to offer suggestions for improvements.

There is a tendency to make use of laymen in revising the courses of study. No definite method has been devised for this purpose. Each place endeavors to develop plans adapted to its own conditions. The help that can be obtained from those who are not directly connected with the school is questionable. The changes that are sought in the curriculum involve problems that are not solved merely by reference to experience, especially when that experience was obtained in the early school life of the adult concerned.

The coöperation of laymen in the revision of the curriculum may serve the desirable purpose of making those outside of the school organization familiar with the plans of the school. Unless some attention is given to enlightening the public, new courses of study are likely to be opposed and the efficiency of the schools thereby greatly lessened. Parent-teachers' organizations have helped to spread knowledge concerning school policies and in some cases to help in the establishment of these policies. In most cities, however, there is lacking any definite device for bringing parents and other citizens into active coöperation with the schools in curriculum revision.

One of the administrative features that is receiving much attention in cities where curriculum revision is under way is publicity. It is true that the public has delegated its responsibility for the conduct of the schools. In theory the only way in which it can influence the work of the school is

by means of electing those whose ideas inspire confidence. In practice, however, the situation is quite different. Any pronounced dissatisfaction with the schools finds expression in such ways as to affect the system seriously, and in most cases to eliminate the policy involved. It is this significant influence of the public that school officials are endeavoring to control. For this purpose the newspapers are used, and there has also been developed a type of bulletin that carries to the patrons of the school a description of conditions that they ought to understand. Some of the cities issue regular courses of study leaflets that are distributed without cost.

THE SELECTION OF SUBJECT MATTER

There are many different opinions regarding the subject matter that should be taught in the elementary schools. This diversity of opinion is caused in part by different conceptions of the aims and objectives for the schools, and in part by different conceptions of the ways in which they may be achieved. Dr. Monroe¹ has classified the aims and objectives of education as follows: practical efficiency, morality, piety, learning, obedience, individual development, social efficiency, and mental discipline. Some of these are no longer considered in the elementary school, but there is still a difference of opinion as to which of the objectives named is the most important. In recent years some influential educators have given expression to the belief that the schools are neglecting learning as an aim. Still others are urging the necessity for more definite attention to moral training, or character-building. In general, however, the tendency is to emphasize social efficiency as an aim for education.

Dr. Dewey has urged that the general aim of education is

¹ MONROE, PAUL. *History of Education*, New York, 1905.

social efficiency.¹ He states his conception of social efficiency as follows :

If an individual is not able to earn his own living and that of the children dependent upon him, he is a drag or parasite upon the activities of others. He misses for himself one of the most educative experiences of life. If he is not trained in the right use of the products of industry, there is grave danger that he may deprave himself and injure others in his possession of wealth.

Ultimately social efficiency includes good citizenship, for it means neither more nor less than capacity to share in a give-and-take experience. It covers all that makes one's own experience more worth while to others, and all that enables one to participate more richly in the worth-while experiences of others.

This is impossible without culture, while it brings a reward in culture because one cannot share in intercourse with others without learning — without getting a broader point of view and perceiving things of which one would otherwise be ignorant.

The Commission on the Reorganization of Secondary Education urges worthy citizenship as the chief objective of education.² It made the following recommendation :

In order to determine the main objectives that should guide education in a democracy it is necessary to analyze the activities of the individual. Normally he is a member of a family, of a vocational group, and of various civic groups, and by virtue of these relationships he is called upon to engage in activities that enrich the family life, to render important vocational services to his fellows, and to promote the common welfare. It follows, therefore, that worthy home-membership, vocation, and citizenship demand attention as three of the leading objectives.

¹ DEWEY, JOHN. *Democracy and Education*, New York, 1916. The Macmillan Company.

² COMMITTEE ON THE REORGANIZATION OF SECONDARY EDUCATION. *Cardinal Principles of Secondary Education*. Bulletin No. 35, Washington, D. C., Bureau of Education, Department of the Interior.

Aside from the immediate discharge of these specific duties, every individual should have a margin of time for the cultivation of personal and social interests. . . . Education for the worthy use of leisure is of increasing importance as an objective.

To discharge the duties of life and to benefit from leisure, one must have good health. The health of the individual is essential also to the defense of the Nation. Health education is, therefore, fundamental.

There are various processes, such as reading, writing, arithmetical computations, and oral and written expression, that are needed as tools in the affairs of life. Consequently, command of these fundamental processes, while not an end in itself, is nevertheless an indispensable objective.

And, finally, the realization of the objectives already named is dependent upon ethical character, that is, upon conduct founded upon right principles, clearly perceived and loyally adhered to. . . . Consequently ethical character is at once involved in all the other objectives and at the same time requires specific consideration in any program of national education.

This Commission, therefore, regards the following as the main objectives of education: 1. Health. 2. Command of fundamental processes. 3. Worthy home-membership. 4. Vocation. 5. Citizenship. 6. Worthy use of leisure. 7. Ethical character.

Dr. Cubberley¹ considers the following as the objectives of American education:

The adult as well as the young must be trained for literacy, and the English language must be made our common national speech.

Girls as well as boys must be trained for responsible citizenship in our democracy.

In our high schools and colleges the most promising of our youth must be trained for leadership and service in the State, given a vision of our world place and relationships,

¹ CUBBERLEY, ELLWOOD, P. *Public Education in the United States*, Boston, 1919.

and prepared for constructive service along the lines of the highest and best of our national traditions in statesmanship, business, science, and government.

In our common schools and in our special schools those who labor must be trained for vocational efficiency, and given a sense of their responsibility for promoting the national welfare.

The school, too, must take upon itself new duties in teaching health, promoting healthful sports, training in manly and womanly ways, inculcating thrift, teaching the principles underlying the conservation of our human and material national resources.

The school, too, must take part in preparing the rising generation for a more intelligent use of their leisure time. This last involves training for appreciation and intelligent enjoyment by developing better the musical, artistic, and literary tastes of our people.

Along with all these important aspects of the educational process must come the development generally among our people of a higher moral tone.

Dr. Bobbitt¹ has grouped more than a thousand particularized objectives under the following ten divisions:

Social intercommunication — mainly language.

Physical efficiency — the development and maintenance of one's physical powers.

Unspecialized practical labors — such as repairing simple mechanical devices used in the home, driving a motor car, etc.

Occupational objectives — the labors of one's calling.

Efficient citizenship — the activities of the efficient citizen.

Social efficiency — activities involved in one's general social relationships and behavior.

Leisure occupations — recreations and amusements.

General mental efficiency — its development and maintenance.

Religious attitudes and activities.

¹ BOBBITT, FRANKLIN. *Curriculum Making in Los Angeles*, 1922.

Parental responsibilities — the upbringing of children and the maintenance of home life.

Dr. Bonser¹ has grouped the objectives under the four following heads:

1. Health — The welfare of the individual and the perpetuity of the race are both dependent on physical vigor and sound health.

2. Fundamental processes — Every member of society has need of the tools and conventions of civilized life. This technique includes methods of producing and supplying the primary wants of the body: food, clothing, and shelter. Only as these tools are acquired is it possible for all to share in that practical efficiency which is a part of the daily work and intercourse.

3. Civic and social relations — Every individual is a member of several groups. There need to be developed ideals and habits of coöperation in civic and social enterprises. These social relations include: (a) citizenship, (b) moral and ethical character, (c) home membership.

4. Recreation — Leisure time should be used for the enjoyment and enrichment of life and to cultivate interests and means of recreation of common value to all.

Each of the statements of aims and objectives that have been quoted have had marked influence in the schools. The *Cardinal Principles of Secondary Education*, as stated by the Commission on the Reorganization of Secondary Education, were the controlling ideas in the revision of secondary school courses. Los Angeles employed Dr. Bobbitt to assist in revising courses in its schools, and his conception of the aims and objectives of elementary education were naturally influential. The state of Minnesota adopted the ideas of Dr. Bonser and developed the state course of study accordingly.

In some cities the aim of education as it influences the

¹ BONSER, FREDERICK GORDON. *The Elementary School Curriculum*, New York, 1922.

course of study had been stated in somewhat different terms from those indicated above. The members of the school department of Berkeley, California, working under the guidance of Superintendent H. B. Wilson, accepted social efficiency as the aim of all education, but they analyzed social efficiency into five phases: (1) vital or physical efficiency, (2) vocational efficiency, (3) avocational efficiency — right use of social leisure, (4) civic efficiency, and (5) moral and religious efficiency. The materials for their courses of study were selected in accordance with this analysis. Their courses state what knowledge, habits and skills, and attitudes should be developed in connection with each phase.

In revising the courses of study for the public schools of Kalamazoo, Michigan, the purpose of elementary education was considered to be training for complete and worthy living. This controlling objective was analyzed into seven minor objectives: (1) health and physical development, (2) the fundamental processes, (3) worthy home membership, (4) vocation (agricultural, industrial, commercial, and professional), (5) worthy citizenship (community, state, and national), (6) right use of individual and social leisure, and (7) ethical character. Each of these objectives is further analyzed into the appropriate knowledge, habits, ideals, and appreciations that should be developed.

Differences of opinion on the courses of study are not confined to matters that have to do with the aims and objectives of education. There are equally wide differences of opinion as to how the aims and objectives shall be achieved. The determination of the aims and purposes is a problem within the field of sociology. The school must, however, take into account the nature of the learner. This involves the field of psychology. Those outside of the school and sometimes those within often lose sight of the children, and in their desire to produce changes in society urge upon the schools

matters that are out of keeping with child nature. It is this tendency to crowd into the curriculum a variety of new subjects, while holding to all of the older ones, that has led to much of the present dissatisfaction. Children have had to deal with so many different subjects that they have become confused and failed effectively to achieve any of the objectives for which the school exists.

There are two extreme views regarding the most successful method of attaining the aims of elementary education. According to one of these it is best to ignore all objectives that do not have immediate connection with the child's present life. The child, therefore, selects the subject matter for the curriculum in response to his own needs as they exist from day to day. It is held that by meeting these present needs the child will be best fitted to meet needs as they arise later in his adult life.

At the other extreme is the conception that during the school period the child should secure the knowledge and training that he will require as an adult. This view may involve the offering of strictly vocational courses in the upper years of the elementary school. The materials for the courses of study are selected from those which are important in adult life and the effort is made to fit children to this subject matter.

Between these extremes there are all degrees of variation. According to one view it is important to consider the life of the child, but he must be constantly directed toward adult needs. The subject matter that is required is selected by both the children and the teacher in response to needs that the children recognize but which may have been developed by the teacher.

Still another conception is that the objectives of the school can best be accomplished by presenting the subjects that will meet adult needs, but that these subjects should be so modi-

fied as to make an appeal to children. The course of study is derived from existing courses with such modifications as are clearly indicated by research and experiments.

It is possible to find all of these different views in operation in different places in the United States. A few of the private schools conduct the early grades in accordance with the immediate needs of the children. Other private schools are basing their courses upon the needs of children, but they are endeavoring to shape these needs. The courses that are in use in most schools, however, show a decided tendency to emphasize adult needs. It is assumed that teachers will adapt the subject matter to the needs and capacities of the children, but the prevalence of drill as a method of teaching and the testing of memory in determining the achievements of the school indicate that in actual practice this assumed adjustment to child life is not made.

Several well-defined methods are employed for selecting the subject matter that is used in courses of study. The most common plan has been to search existing courses for materials that are acceptable, a practice that is often called the "scissors and paste" method. This method is widely used in determining the amount of time that shall be devoted to each subject. Studies have been made of the time allowances in different cities and states and the median of these is taken as a standard. There are prominent educational leaders who believe that it is important to consider current practices in education; they urge that as the school systems within a democracy have had opportunity to change subjects whenever the needs were evident, any subject or topic that has persisted in the course of study *ipso facto* meets a need. There are none who advocate this as the only method that should be used; all believe that materials that are found in this way should be supplemented by the use of other methods.

Another method that has been used for the selection of materials involves the thorough analysis of needs; usually they are those of adults as they are manifested in use. The best example of the use of this method is found in modern courses of study in spelling. There was a time when the elementary school pupil was expected to learn the spelling of more than twenty thousand words. These words had been selected from the dictionary in accordance with the individual views of the person who did it. Unusual words and those that presented peculiar difficulties were included. When the achievement of school children in spelling was investigated, it was shown that the subject was not well taught. Students of education then began a thorough analysis of the words that were actually used in newspaper and magazine articles, in private and business correspondence, and in the various texts that were used by the children. It was shown that there are about one thousand words in common use. These words are now found in every new course of study as well as in the more recent textbooks in spelling. In addition, there is a list of about two thousand words that are in sufficiently common use to entitle them to consideration. This method of selecting words for spelling has resulted in decreasing the number to about one tenth of that which was considered necessary a generation ago.

The method that has been used in spelling has been tried in arithmetic, geography, and history, but it has not had as pronounced an effect upon the courses in these subjects as it had in spelling. Some topics have been eliminated from many arithmetic courses; the amount of attention given to the location of unimportant places in geography has been reduced, and courses of study in history do not now give as marked attention to wars as they did earlier.

There are those who advocate the selection of subject matter to meet specific objectives. They believe that it is

essential to determine the objectives for each subject and then to select the material that will enable the pupil to accomplish this objective. This method has been carried far enough to indicate several hundred objectives in some of the subjects. Los Angeles has endeavored to use this method in selecting the subject matter for its secondary-school courses.

Recently attention has been given to study of the nature and interests of young children. It is believed that a better understanding of child nature will make it possible to select those activities that will constitute an effective course of study. This method of selecting activities that will meet the specific needs of young children has resulted in several "activity courses."

During the time that educators have been discussing the question of the proper subject matter to include in courses of study, the public itself has taken definite action. It has become increasingly common for state legislatures to enact laws that either compel the teaching of a given subject or that prohibit its teaching. At present the laws of most of the states require that the following subjects shall be taught: reading, spelling, penmanship, arithmetic, English, geography, United States history, Constitution of the United States, civics, physiology and hygiene, scientific temperance, and physical education. Usually the laws are not specific beyond the mere mention of the subject. The following subjects are each required in two or more of the states: effects and prevention of tuberculosis, morals and manners, communicable diseases, nature study or elementary science, elementary agriculture, horticulture, household arts, manual training, elementary industrial work, thrift, elementary bookkeeping, music, drawing and art, accident prevention, humane treatment of animals, and fire prevention.

The schools, moreover, are required by law to observe in some appropriate manner a large number of special days.

These include Lincoln's Birthday, Washington's Birthday, Bird and Arbor Day, Memorial Day, Labor Day, Columbus Day, Armistice Day, Thanksgiving Day, and Christmas. In addition various states require the observance of days that are of interest to the people of the state concerned; these include the following: Patriots' Day, observed in Maine and Massachusetts; Good Roads Day, in Colorado; Fire Prevention Day, in Connecticut; Pioneer Day, in Montana and Utah; Uncle Remus Day, in Georgia; and Woodrow Wilson Day, in South Carolina.

Considerable attention has recently been given to the laws that have been enacted on subjects that may not be taught in the public schools. The most noteworthy of these was passed in Tennessee. The legislature of this state enacted a law making it illegal for any teacher to present the subject of evolution; one teacher disobeyed the law, was placed on trial, and convicted. It has been necessary for the publishers of textbooks that are used in that state to revise their books so that they contain no reference to evolution. The same question has been under consideration in several of the states and it is safe to say that there are at least a half dozen states in which the teachers in the public schools do not feel at liberty to mention evolution in their classes. In New York City a discussion arose in reference to the treatment that was accorded to the pioneers in this country. It was alleged that some of the textbooks in use in the schools did not treat the patriots with sufficient respect. It was not urged that they did not tell the truth, but rather that they told facts that detracted from the great honor that these men had received. A city official, not connected with the schools, was given authority to pass upon this matter and as a result a number of textbooks may not be used in the public schools of New York, and there is very definite dictation as to what shall and shall not be said in reference to people and events.

This tendency on the part of the public to dictate what shall and shall not be taught within the public schools is a matter of serious importance. Those who are connected with the schools have in general endeavored to avoid legal statements regarding the subject matter that should be taught in the public schools. In the earlier history of the country legislatures were not particularly concerned with this matter. More recently, however, there has been an increased recognition of the influence that the public schools may exercise. This grew out of the experience during the World War, when the schools were used with marked effect for purposes of publicity. At the close of the War various organizations representing various interests continued to appeal to the schools for assistance. It has been stated by school officials that there is scarcely a week when they are not urged to turn the attention of the schools to some matter proposed by a national or local organization. When they are refused access to the schools, there is a tendency for them to use their influence, often successfully, to secure legislation to compel the schools to give them the desired attention.

THE ORGANIZATION OF SUBJECT MATTER

The organization that has been used in most courses of study is a logical form. Children begin with the elements of a subject and continue until they are thought to have an orderly knowledge. American history, for example, has been presented by teaching first the period of discovery, then the period of colonization, and so on in chronological order through the history of the country. This type of organization has led to a large number of separate subjects, usually unrelated to each other and sometimes taught by different teachers. Under these conditions it is necessary to present the subject in such brief form as to be ineffective. Many of

the newer courses, however, still employ this logical or subject-matter form of organization.

An effort has been made to bring about a closer relationship between different subjects and thereby decrease the number of different studies. Closely related subjects such as history, geography, and civics have been combined and treated as a single subject. There are now courses in general science and in general mathematics. This method of organizing the courses of study is still in the experimental stage. A number of schools are coöperating in definite investigations based upon the actual use of the method.

Another method of organizing the subject matter has been under consideration for several years. This plan proposes to eliminate the academic subjects and to substitute projects or problems such as will call for the use of subject matter. This form of organization is under trial in many school systems. In no instance, however, is the entire work of the school organized in this way. Those who advocate the plan believe that this form of organization will need to be developed gradually and this is the position that is now taken in most school systems.

The emphasis that has been placed upon individual differences among school children is leading to a new form of organization in the courses of study. The extensive use that is made of both intelligence and achievement tests throughout the schools of the country has made it possible to group children in accordance with their abilities. In most places there has been no recognition of different abilities in the courses of study. At present some of the newer courses are presenting an organization that makes it possible to deal with groups. One method that is employed consists in indicating the maximum amount of work that will be expected in any given subject. This represents the amount that the most capable children are expected to accomplish.

Some of the topics of less importance are eliminated from this course and the resulting selection is the course that is required of children of normal ability. There is a third selection of subjects which are supposed to constitute the minimum essentials, and these make up the course that is followed by children of inferior ability.

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